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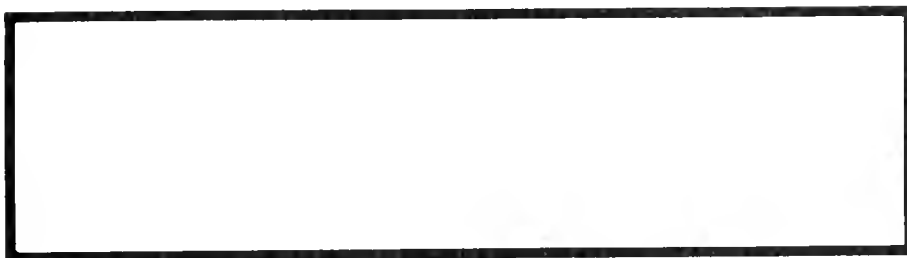
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MONTANA LEGISLATIVE  
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# Volume I

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# FORT UNION REGIONAL TASK FORCE PROCEEDINGS

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## PREFACE

With partial support from the National Science Foundation, the four states of North Dakota, South Dakota, Montana and Wyoming, have created seven task forces to study the interstate effects of the development of the Fort Union Coal Formation which underlies parts of each of these states. The task forces include key legislators, executive branch personnel, academicians, representatives of Indian tribal nations, and citizens representing the general public of each state. Topics of common concern facing the groups include air quality, water quality, water allocation, plant siting, energy development, reclamation, taxation, and social and economic impact. The task forces examined methods to assist member states in problem solving as well as acquainting the members with the energy development positions and accompanying laws and regulations of their sister states. Federal and regional information sources are used to obtain current energy-environmental data. In sum, these task forces are special interim committees serving to provide each member state with the information and materials necessary for sound policy decisions relative to energy-environmental issues during the 1977 Legislative Sessions. This publication is the culmination of these task forces' work and research gathering efforts.



Final Report  
of the  
FORT UNION REGIONAL TASK FORCE  
ON  
AIR QUALITY

Compiled by Project Coordinator  
and  
Edited by Task Force Members

December 1976



## Project Coordinator's

### Summary Report

After research, discussions, and planning, the Fort Union Regional Task Force on Air Quality recommended a continuing interstate committee, appointed by the respective governors and made up of two air quality technicians, one legislator, and one Indian, address the following concerns: exchange of air quality data; review of present air class designations; review of pending energy development; plan air quality positions; develop comparability and compatibility in air quality parameters measured; encourage continued research on fugitive dust emissions, trace elements, and possible precipitation changes due to energy development; encourage Indian and federal communication with the states; provide readable data for legislative and private use; and rewrite present short-term standards for ambient air quality.

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## FINAL REPORT

### Introduction

The Fort Union Regional Task Force on Air Quality had its genesis in the Fort Union Coal Conference held in Bismarck, North Dakota, in October 1975. The air quality panel at the Coal Conference discussed various interstate concerns relating to air quality and energy development. Prime areas of concern included:

1. The possibility of reduced precipitation due to large-scale coal burning which accompanies energy development.
2. The possibility of acid rains or other harmful fallout from development activity.
3. State's designations of air quality within its borders.
4. Trace element research being conducted or which has been conducted.
5. Environmental Protection Agency role in coordinating information exchange.
6. Air quality monitoring network stations.
7. The role of Indian tribes within the four states concerning energy development and air quality.

### Assignment

The assignments given the Fort Union Regional Task Force on Air Quality included the following:

1. Continue to support research on the problem of precipitation changes from energy development and develop antidotes against undesired precipitation changes.
2. Review existing literature and data concerning inadvertent weather modification.
3. Involve Indian tribes within the four states in matters relating to air quality programs and problems.
4. Consider common policy relating to significant deterioration of air quality.
5. Resist classifying any air region within the four states as Class III based on EPA air quality standards.
6. Exchange information on current energy development within the four states on air quality monitoring networks within the states, and on energy research within the four states.

7. Examine the feasibility of developing compatible ambient air quality standards among the four states.

### Background

Dr. Allyn Lockner of South Dakota served as the task force chairman. Mr. Willis Van Heuvelen of North Dakota served as vice chairman of the task force. Ms. Lonnie Langenfeld, South Dakota Legislative Research Council, served as permanent recording secretary for the task force.

The Fort Union Regional Task Force on Air Quality held two meetings. The organizational meeting was held Thursday, June 10, 1976, in Pierre, South Dakota; and the second meeting was held Monday, August 9, 1976, in Sheridan, Wyoming.

### Information Researched

Background information on coal development in general and air quality in specific in the four Fort Union states was reviewed with the assistance of the United States Environmental Protection Agency (EPA). A synopsis of that information follows:

1. Eight different entities have projected coal demand in the Northern Great Plains states. A list of those coal development scenarios and brief summary of each are given in Appendix "A", page 10.
2. Estimates of present coal resources in the six-state area of EPA Region VIII, as well as present usages within the four Fort Union states, were studied. (See Appendix "B", page 17.) (Maps of the actual mining regions were also viewed by the task force members. They are available through the project coordinator.)
3. The expected effects of various pollutants were summarized by EPA personnel, e.g., for particulate matter, sulfur oxides, nitrogen oxides, and photochemical oxidants. Impact concerns include health, vegetation, materials, visibility, and climate. See Appendix "C", page 19, for these summaries.
4. The terms "ambient" and "emissions" were defined. Ambient air is the "stuff" people breathe. Ambient air standards would measure the quality of the air people breathe. Emissions are the effluent being discharged through smokestacks, etc., into the atmosphere. Also, "primary" and "secondary" standards were defined. Federal standards have two levels, primary and secondary. Primary federal standards relate directly to the health of a person. These standards must be met in order to maintain a healthy and liveable environment. Secondary standards pertain to society's welfare, not just health.

5. The EPA representatives explained the proposed amendments to the Clean Air Act presently being debated in Congress.
6. The EPA personnel discussed air quality as it relates to Indian tribes, and explained that a federal land manager or a tribal government can request a reclassification of air class designation within a state.
7. Also explained was the fact that air class differences can be reconciled interstate or intrastate by arbitration, but an incrementally higher air quality standard cannot violate a lower standard. Air from a geographical area with a lower standard could wipe out higher air standards within its area of influence.
8. The EPA provided comparisons of the ambient air standards in the four states and comparisons to the federal governmental standards. A summary was made of particulates regulated within the four states and by the federal government. Also summarized were allowable levels of sulfur oxides, nitrogen oxides, and other emissions. (See Appendix "D", page 23.)
9. The EPA gave an overview of existing air quality in the Northern Great Plains states specifically analyzing total suspended particulate matter, annual geometric mean; total suspended particulate, maximum 24-hour concentration; SO<sub>2</sub> annual arithmetic mean; SO<sub>2</sub> maximum 24-hour concentration; and NO<sub>2</sub> maximum 24-hour concentration. (See Appendix "E", page 30.)
10. The EPA and the task force members reviewed sources of energy/air quality studies. Those researching air quality include the various states, EPA Region VIII, EPA (national), OWRC, ERDA, REAP, universities, industries, and possibly many other agencies. (See Appendix "F", page 37.)

The task force membership discussed siting regulations as they relate to air quality. Mr. Mike Roach of Montana informed the task force that the Board of Natural Resources has the authority to grant certificates for construction. The board cannot certify a facility unless the Department of Health certifies that a facility will meet all air and water standards.

North Dakota's program was outlined by Mr. Van Heuvelen. Three permits involved in siting are the water permit, the Public Service Commission siting permit, and the Health Department permit.

Mr. Randolph Wood explained the Wyoming legislation in regard to energy siting facilities. The Wyoming Siting Council has the authority to issue a permit with no conditions, a permit with various conditions, or to reject a permit pending further investigation.

Dr. Allyn Lockner reported that South Dakota does not have any siting statutes at this time.

Potential problems arising because Indian tribes want air quality standards within reservation boundaries to be reclassified were discussed by the task force. The Northern Cheyenne, located in Montana, has asked EPA for a reclassification. Possibly other tribes will also be requesting reclassification of air standard designations. The task force noted the need to ensure that state efforts in air quality are compatible with the federal government and tribal governments. See Appendix "G," page 44, for detailed information on Indian rights as submitted to Mr. Roach by the EPA.

The task force discussed significant deterioration and its impact on land use programs. Also discussed was air quality planning which must be carried on and completed within the states. Other important areas deal with visibility and aesthetics, which also tie in with other state policies.

Dr. Richard Schleusener, President of the South Dakota School of Mines and Technology, Rapid City, kept the task force informed on possible precipitation changes due to energy development. Task force members reviewed a memorandum prepared by Dr. Schleusener on this topic. (See project coordinator for copy.)

The many concerns of the Air Quality Task Force were consolidated and prioritized by the members. Nine priority areas were investigated for the second meeting. The nine areas are as follows:

1. Interstate cooperation on air class designations.
2. Information exchange on state laws and regulations.
3. Monitoring federal action.
4. Joint quality assurance to ensure interstate comparability.
5. Fugitive emissions from coal mining activities.
6. Question of air quality on Indian reservations.
7. Public information and public relations effort.
8. Short-term standards that are exceeded due to high winds.
9. Potential precipitation changes due to energy development.

At the time of the organizational meeting, the Moss amendments to the Clean Air Act were in debate at the national level and the task force went on record as opposing the Moss amendments and stated that if the Moss amendments carry the four states will pursue a common recommendation for preventing significant deterioration. The Moss amendments were defeated.

See Appendix "H", page 58, and "I", page 65, for the first and second meeting minutes respectively.

### Recommendations and Actions

The recommendations and actions of the task force are contained in the minutes of the second task force meeting. In summary those recommendations or activities are as follows:

1. A copy of the resolution indicating the Air Quality Task Force was not in favor of the Moss amendments presently proposed as additions to the Clean Air Act was sent to the Congressional Delegations of the four states.
2. In response to a resolution of the Common Data Element and Information Exchange Task Force to all Fort Union Regional Task Forces relative to a common data element dictionary, the Air Quality Task Force sent copies of glossaries on air quality, and copies of air quality standards and rules and regulations of each state to the Common Data Element Task Force.
3. On behalf of the task force, the project coordinator will continue to watch federal legislation that may affect air quality control in the four-state region.
4. The task force decided to send the task force final report to the Midwest Governors Conference, the Western Governors' Regional Energy Policy Office, and the Energy Committee of the National Governors Conference and ask for their support in the recommendations which came out of the task force.
5. The task force recommended that a committee made up of four people from each state (two technical persons, one legislator, and one Indian representative all appointed by the governors of the respective states) make up a continuing interstate entity to study air quality.
6. The governors of the respective states are to be informed of the desire to have them appoint a standing committee (see Recommendation No. 5) which would meet on a regular basis to exchange data, review air quality designations and pending development, and review and identify all boundary areas by degree of environmental concern (prior to development), as part of an advance air quality planning process.
7. The task force advised the continuing entity (see Recommendation No. 5) to be concerned with the following:
  - a. Development of commonality in air quality data collection, analysis, and reporting.

- b. Development of comparability and compatibility of parameters being measured within the four states. Also, information exchange on any new pollutants measured and data collected to date on the various pollutants now measured in each state.
- c. Continue efforts to study the magnitude of fugitive dust emissions, and the effects of fugitive dust emissions from energy development and conversion processes; and to develop appropriate measurements for these dust emissions.
- d. Recommend, support, and locate moneys for more research on trace elements in coal. (Other research agencies were informed of the need for research on trace elements.)
- e. Invite representation of Indian tribes on any committee established to prevent significant deterioration and provide advanced planning for air quality. Establish a cooperative arrangement with the tribes and the EPA enabling the states to conduct, on behalf of the tribes, air quality monitoring, data acquisition, and technical assistance, representation and input on air impacted by proposed development.
- f. Educate the legislators and the public regarding air quality through periodic reports, in a form readable by a lay person, on its activities, findings, and conclusions. These reports shall also include analysis of air quality problems. The continuing entity must also investigate possible means of disseminating these reports through the respective extension services in each state. Encourage information exchange because legislators and the public need a sound informational basis to decide how many plants, of what nature, producing what air emissions, within what distance from each other, are safe and healthy, and from what distance farms and cities are affected.
- g. Encourage further research on short-term standards of ambient air quality and recommend that the present short-term standards on ambient air quality be rewritten to allow involved agencies time to reevaluate historical frequencies, and to carry out a review to see if exceeding the standards was avoidable.
- h. Recommend support of scientific and agricultural research groups studying the anticipated effects of precipitation changes due to energy development.

COAL DEVELOPMENT SCENARIOS

1. North Central Power Study
2. NGPRP
3. CEQ/FEA
4. NSF/RANN
5. ERDA - 48 and ERDA - 76
6. USBM
7. FEA 76
8. Reality

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NGPRP Presentation

## NORTH CENTRAL POWER STUDY (NCPS)

### Study Area:

Utah, Colorado, Wyoming, Idaho, Montana, North Dakota, South Dakota, Missouri, Nebraska, Kansas, Iowa, and Minnesota, and minor parts of Illinois, Oregon, and Wisconsin.

### Time Frame:

1978 to 2000; Investigation years for data gathering and analysis; 1980, 1985, 1990 and 2000.

### Assumption:

Overall Annual Growth Rate for Power Consumption = 6.5% between 1980 and 2000.

### Coal Resources:

Proven reserves capable to produce 200,000 MW of thermal generation from sub-bituminous and lignite fields of Montana, North Dakota, South Dakota, Wyoming, and Colorado.

Estimated Total NCPS Coal Use: 8 Billion Tons

### Power Generation Potential:

Ultimate development level to be supplied from NCPS resources equals 53,000 MW

Generation potential based on strippable coal sites for 1,000 MW or more base-load mine-mouth generating plants:

13	10,000 MW plants	
11	5,000 MW plants	
3	3,000 MW plants	
15	1,000 MW plants	
<hr/>		
42	209,000 MW	TOTAL



Study Area:

63 counties in Montana, North Dakota, South Dakota, and Wyoming.

Time Frame:

1975, 1980, 1985, and 2000.

Assumption:

Annual growth rate in National energy consumption of 3.27%.

Coal Resource:

160 billion tons: reserve base, measured and indicated by studies,  
minable (37% of Nation's coal reserve base)

80.2 billion tons: minable by surface methods.

NGP Projected Coal Production:

Coal Development Profile (CDP)	1975	Million Short Tons		
		1980	1985	2000
Low (I)	52	91	108	144
Intermediate (II)	52	107	192	362
High (III)	52	160	382	977

CDP I: Sufficient to meet existing contractual agreements in regional demand for coal ("low" level for future energy development).

CDP II: Conforms to 1973 regional energy supply projections of DOI ("intermediate" level)

CDP III: NGP response to long-range national "emergency" based upon shortfalls in imported petroleum, Canadian natural gas, and nuclear generating capacity ("high" level).

Additional Coal Development Profile Data  
Number of Facilities (All Numbers Cumulative)

	1980	1985	2000
<u>CDP I:</u> Export Mines	14	15	18
Powerplants (MW)	12 (5613 MW)	14 (6613 MW)	20 (13100 MW)
SNG Plants	0	0	0
<u>CDP II:</u> Export Mines	16	20	24
Powerplants (MW)	12 (5613 MW)	14 (6613 MW)	25 (19400 MW)
SNG Plants	0	7	16
<u>CDP III:</u> Export Mines	16	26	64
Powerplants (MW)	12 (5613 MW)	14 (6613 MW)	25 (19400 MW)
SNG Plants	7	13	41

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Coal Demand Study Projections of NGP  
Coal Mining and Energy Conversion Development

Study Area:

Montana and adjacent NGP States (and expanded 21-state market area)

Time Frame:

1975, 1980, 1985, 2000

Assumptions:

NGP Coal Development Dependent Upon:

- Geographic Extent of Market
- Growth of Electric Energy Demand (1%, 3%, or 5%)
- Fuel Mix (Allocation of Projected Electric Energy Demand Among Alternative Fuel Sources)
- Fuel Source (Share of Coal Demand in NGP Market Region Met by NGP Coal)

Most Reasonable Coal Production in NGP:

- I. Based on Constant Growth in Electrical Generation, 1980-Based Contract Share of All Coal Demand, and Constant Share to Coal Vis-A-Vis Other Fuels.

Expanded Market Estimate

<u>Growth in Electrical Production</u>	<u>1980 NGP Coal Share</u>	<u>1980</u>	<u>Millions of Tons</u>	
			<u>1985</u>	<u>2000</u>
3%	.77	135.7	137.3	213.8
5%	.67	135.7	172.9	359.5

- II. Based On Price Sensitive Estimate of Growth in Electrical Generation, 1980-Based Contract Share of Coal Demand, and Constant Share to Coal Vis-A-Vis Other Fuels

Expanded Market Rate

<u>Annual Rate of Price Increase (Electric, Gas)</u>	<u>1980 NGP Coal Share</u>	<u>1980</u>	<u>Millions of Tons</u>	
			<u>1985</u>	<u>2000</u>
FPC, 3%	.65	135.7	161.3	221.3
3%, 5%	.72	135.7	130.1	114.7

NSF/RANN MONTANA UNIVERSITY  
(continued)

Coal Gasification in Northern Great Plains

	<u>Coal Requirements</u>		
	Million Tons Per Year		
	<u>1980</u>	<u>1985</u>	<u>2000</u>
Most Probable	0	0	0
Low	0	0	0
High	0	36.6*	36.6*

\* Based on three plants at 250 MW Scf/day each

ERDA - NATIONAL PLAN FOR ENERGY RESEARCH,  
DEVELOPMENT AND ADMINISTRATION

Study Area:

United States

Time Frame:

1985 and 2000

Scenarios:

0	No New Initiatives
I	Improved Efficiencies in End-Use
II	Synthetics for Coal and Oil Shale
III	Intensive Electrification
IV	Limited Nuclear Power
V.	Combination of All Technologies

Coal Production:

	Millions of Tons	
	<u>1985</u>	<u>2000</u>
Scenario 0	1006	1614
Scenario I	879	1091
Scenario II	1108	2370
Scenario III	957	1453
Scenario IV	951	2184
Scenario V	863	1862

NOTE: Scenario II represents a ten-fold increase in coal synthetics between 1985 and 2000 and also the largest demand on coal (a doubling of production from 1985 (1975: 640 MT) and doubling again by 2000.

General Conclusion:

To meet mid-term (1985-2000) requirements for liquid fuels and to buy time to prepare for long-term (beyond 2000) requirements, it is necessary to pursue all technology "packages" (i.e., Scenario V).

U.S. BUREAU OF MINES - ENERGY THROUGH THE YEAR 2000 (REVISED)

Study Area:

United States

Time Frame:

1974, 1980, 1985, 2000

Assumptions:

Estimated Increases in GNP and Population Growth

Not too Restrictive Regulation of Surface Mining

Government Leasing of Western Coal, Off-Shore, Oil Shale, and Geothermal Lands

Government R&D Support

Relaxation of Well Head Price Regulations

1974 Prices (i.e., no price effects considered)

Further Development of Commercial Techniques for Coal Gasification and Liquefaction

Further Development of Sulfur Oxide Control

Coal Consumption by Sector:

	Million Short Tons			
Domestic Demand:	1974	1980	1985	2000
Household & Commercial	10.9	4	3	----
Industrial	155	185	190	228
Electrical Generation	390.6	547	704	941
Synthetic Gas	-----	----	26	300
Synthetic Liquids	-----	----	---	91
Total Domestic Demand	556.5	736	923	1560
Total Export Demand	59.1	70	75	100
Total Demand	615.6	806	998	1660

COAL RESOURCES

Coal Use:

	Thousand Tons	
	<u>1974</u>	<u>1975</u>
Colorado	7,290	8,210
Montana	4,252	4,514
North Dakota	5,812	5,650
South Dakota	442	2,200
Utah	4,514	4,252
Wyoming	<u>6,731</u>	<u>7,855</u>
REGION VIII TOTAL	29,041	32,681
U.S. Total	603,479	640,826
Total Export	45,809	48,405

Coal Production:

	Thousand Tons		1974
	<u>Underground</u>	<u>Surface</u>	<u>TOTAL</u>
Colorado	3,260	3,636	6,896
Montana	0	14,106	14,106
North Dakota	0	7,463	7,463
South Dakota	0	0	0
Utah	5,858	0	5,858
Wyoming	<u>526</u>	<u>20,176</u>	<u>20,702</u>
REGION VIII TOTAL	9,644	45,381	55,025

1975 COAL PRODUCTION FIGURES  
MINES IN MONTANA, WYOMING, AND NORTH DAKOTA

<u>State</u>	<u>Mine Name</u>	<u>Company</u>	<u>1975 Production (Tons)</u>
Montana	Decker No. 1	Decker Coal Co.	9,174,634
Montana	Rosebud	Western Energy Co.	6,407,307
Montana	Absaloka	Westmoreland Resources	4,048,082
Montana	Big Sky	Peabody Coal Co.	2,103,110
Montana	Savage	Knife River Coal Co.	320,000
			<u>22,053,133</u>
	TOTAL		
Wyoming	Belle Ayr	AMAX Coal Co.	3,288,079
Wyoming	Dave Johnston	Pacific Power & Light Co.	3,231,649
Wyoming	Seminole No. 2	Arch Minerals Corp.	2,942,064
Wyoming	Sorenson	Demmerer Coal Co.	2,731,351
Wyoming	Medicine Bow	Arch Minerals Corp.	2,570,509
Wyoming	Seminole No. 1	Arch Minerals Corp.	2,440,619
Wyoming	East Antelope	Best Coal Co.	1,195 (1974)
Wyoming	Wyodak (South Pit)	Wyodak Resources Development Co.	727,019 (1974)
Wyoming	Welch	Welch Coal Co.	18,708 (1974)
Wyoming	Big Horn	Big Horn Co.	444,545 (1974)
			<u>18,395,738</u>
	TOTAL		
North Dakota	Glenharold	Consolidation Coal Co.	1,983,872
North Dakota	Gascoyne	Knife River Coal Mining Co.	1,979,253
North Dakota	Husky #2	Husky Industries	160,657 (1974)
North Dakota	Center	Baukol-Noonan, Inc.	1,563,446 (1974)
North Dakota	Beulah (North & South)	Knife River Coal Mining Co.	1,726,349 (1974)
North Dakota	Indian Head	North American Coal Corp.	1,090,144 (1974)
North Dakota	Velva	Consolidation Coal Co.	428,163 (1974)
North Dakota	Noonan	Baukol-Noonan, Inc.	482,299 (1974)
			<u>9,414,183</u>

TONS

Montana	22,053,133
Wyoming	18,395,738
North Dakota	<u>9,414,183</u>
	≈ 49,863,054

## EFFECTS OF PARTICULATE MATTER

### HEALTH

- INJURY TO SURFACES OF RESPIRATORY SYSTEM BY PARTICULATES ALONE OR IN CONJUNCTION WITH GASES ( $715 \mu\text{G}/\text{M}^3$ )
- WORSENING OF CHRONIC BRONCHITIS PATIENTS ( $630 \mu\text{G}/\text{M}^3$ )
- INCREASED MORBIDITY AND MORTALITY AT HIGH POLLUTION LEVELS

### VEGETATION

- LEAF DAMAGE DUE TO PLUGGING OF STOMATES
- MAKE PLANTS MORE SUSCEPTIBLE TO PATHOGENS

### MATERIALS

- SOILING OF MATERIALS
- INCREASED CORROSION ( $60 - 180 \mu\text{G}/\text{M}^3$  ANNUAL AVERAGE)
- DAMAGES ELECTRICAL CONTACTS

### VISIBILITY

- REDUCE VISUAL RANGE (SMALL PARTICLES AND  $150 \mu\text{G}/\text{M}^3$ )

### CLIMATE

- REDUCES TRANSMISSION OF SOLAR RADIATION; SUNLIGHT CAN BE REDUCED UP TO ONE-THIRD



## EFFECTS OF SULFUR OXIDES

### HEALTH

- IRRITATION OF RESPIRATORY SYSTEM ( $105-265 \text{ ug/m}^3$ )
- SYNERGISM WITH PARTICULATE
- INCREASED MORBIDITY AND MORTALITY ( $1500 \text{ ug/m}^3$ )

### VEGETATION

- INJURED TISSUE ( $35 \text{ ug/m}^3$  ANNUAL AVERAGE)
- SULFATE FORMED IN LEAF ADDITIVE TO SULFATE ABSORBED THROUGH ROOTS, AND WHEN LEVELS ACCUMULATE EXCESSIVE LEAF D OP OCCURS
- ACUTE SYMPTOMS HAVE BEEN OBSERVED FOR EIGHT-HOUR PERIODS WITH CONCENTRATION  $> 0.3 \text{ ppm}$
- SUPPRESS GROWTH AND YIELD WITHOUT CAUSING VISIBLE INJURY

### MATERIALS

- CORROSION ACCELERATED AT HUMIDITY ABOVE 70% ( $345 \text{ ug/m}^3$ )
- DAMAGE TO ELECTRICAL EQUIPMENT
- ATTACKS BUILDING MATERIALS
- DAMAGES TEXTILE FIBERS
- INCREASES DRYING TIME OF OIL BASED PAINTS AND AFFECTS PAINT FILM ( $2600 \text{ ug/m}^3$ )

### VISIBILITY

- WITH HUMIDITY OF 50% AND  $\text{SO}_2$  CONCENTRATION  $285 \text{ ug/m}^3$ , VISUAL RANGE REDUCED TO 5 MILES IN NEW YORK CITY

## EFFECTS OF NITROGEN OXIDES

### HEALTH

- GREATER INCIDENCE OF ACUTE BRONCHITIS AMONG INFANTS AND SCHOOL CHILDREN (118 - 156  $\mu\text{g}/\text{m}^3$ )
- INCREASED INCIDENCE OF ACUTE RESPIRATORY DISEASES

### VEGETATION

- LEAF ABSCISSION AND DECREASED YIELD (475  $\mu\text{g}/\text{m}^3$ )

### MATERIALS

- CORROSION AND FAILURE OF ELECTRICAL COMPONENTS

### VISIBILITY

- $\text{NO}_2$  ABSORBS LIGHT AND THEREFORE BY ITSELF CAN REDUCE VISIBILITY TO SOME EXTENT

## EFFECTS OF PHOTOCHEMICAL OXIDANTS

### HEALTH

- EYE IRRITATION ( $200 \text{ Mg/M}^3$ )
- IMPAIRMENT OF PHYSICAL PERFORMANCE ( $60\text{--}590 \text{ Mg/M}^3$ )
- INCREASED AIRWAY RESISTANCE ( $200\text{--}1960 \text{ Mg/M}^3$ )
- CHEST CONSTRICTION ( $590 \text{ Mg/M}^3$ )
- INCREASED ASTHMA ATTACKS

### VEGETATION

- ACUTE INJURY, CELL COLLAPSE
- GROWTH ALTERATIONS ( $60 \text{ Mg/M}^3$  FOR 8 HOURS)

### MATERIALS

- RUBBER CRACKING ( $40 \text{ Mg/M}^3$  FOR 1 HOUR)
- CERTAIN DYES FADE
- ATTACKS CELLULOSE IN FIBERS

# AMBIENT REGULATION SUMMARY

APPENDIX "D"  
Prepared by the  
Environmental  
Protection Agency

STATE:	MONTANA	NORTH DAKOTA	SOUTH DAKOTA	WYOMING	FEDERAL
POLLUTANT					
PARTICULATE					
SUSPENDED	X	X	X	X	X
DUSTFALL	X	X	NONE	X	NONE
SULFUR OXIDES					
SO <sub>2</sub>	X	X	X	X	X
SULFATION	X	X	NONE	X	NONE
SUSPENDED SULFATE	X	X	NONE	NONE	NONE
HYDROGEN SULFIDE	X	X	NONE	X	NONE
SULFURIC ACID MIST	X	X	NONE	NONE	NONE
NITROGEN DIOXIDE	NONE	X	X	X	X
PHOTOCHEMICAL OXIDANTS	NONE	X	X	X	X
CARBON MONOXIDE	NONE	X	X	X	X
HYDROCARBONS	NONE	X	X	X	X
FLUORIDES	X	NONE	NONE	X	NONE
LEAD	X	NONE	NONE	NONE	NONE
BERYLLIUM	X	NONE	NONE	NONE	NONE

# AMBIENT PARTICULATE STANDARDS SUMMARY

FEDERAL  
STANDARDS

MONTANA

NORTH  
DAKOTA

SOUTH  
DAKOTA

WYOMING

PRIMARY SECONDARY

## PARTICULATES

- SUSPENDED ( $\mu\text{G}/\text{M}^3$ )

ANNUAL

24-HR.

COH

- DUSTFALL (Tons/sq. mi./mo.)

3-MONTH AVERAGE (RESIDENTIAL)

3-MONTH AVERAGE (INDUSTRIAL)

\* NOT TO BE EXCEEDED MORE THAN ONCE PER YEAR.

\*\* NOT TO BE EXCEEDED MORE THAN 1% OF DAYS OF YEAR.

# AMBIENT SULFUR OXIDES STANDARDS SUMMARY

	FEDERAL		MONTANA	NORTH DAKOTA	SOUTH DAKOTA	WYOMING
	PRI.	SEC.				
SULFUR DIOXIDE (UG/M <sup>3</sup> )						
ANNUAL	80	--	52	60	80	60
24-HR	365	--	260	--	365	260
3-HR	--	1300	--	--	1300	--
1-HR	--	--	650	715	--	--
SULFATION (SO <sub>3</sub> ) MG/100 CM <sup>2</sup> /DAY						
ANNUAL	--	--	0.25	0.25	--	0.25
30-DAY	--	--	0.50	0.50	--	0.25
SUSPENDED SULFATE (UG/M <sup>3</sup> )						
ANNUAL	--	--	4	4	--	--
24-HR	--	--	12	12	--	--
SULFURIC ACID MIST (UG/M <sup>3</sup> )						
ANNUAL	--	--	4	4	--	--
24-HR	--	--	12	12	--	--
1-HR	--	--	30	30		
HYDROGEN SULFIDE						
- 1/2 HR AVERAGE NOT TO BE EXCEEDED MORE THAN 2 TIMES IN 5 CONSECUTIVE DAYS						
	--	--	42	45	--	40
- 1/2 HR AVERAGE NOT TO BE EXCEEDED MORE THAN 2 TIMES IN A YEAR						
	--	--	70	75	--	70

# AMBIENT NO<sub>x</sub> STANDARDS SUMMARY

	MONTANA					NORTH DAKOTA		SOUTH DAKOTA		WYOMING	
	PRIMARY	SECONDARY									
NITROGEN DIOXIDE ( $\mu\text{g}/\text{M}^3$ )											
ANNUAL	100	--	--	--	--	100	100	100	100	100	100
24-HR.	--	--	--	--	--	--	--	250	--	--	--
1-HR.	--	--	--	--	--	200	--	--	--	--	--

# SUMMARY OF EMISSION REGULATIONS (1), (2)

COAL-FIRED POWER PLANTS	FEDERAL	MONTANA	NORTH DAKOTA	SOUTH DAKOTA	WYOMING
<u>PARTICULATE</u>					
- NEW SOURCE	0.1 20% OPACITY				
- EXISTING SOURCES			0.8 40% OPACITY	0.3 20% OPACITY	
- 100-1000 x 10 <sup>6</sup> BTU/HR		0.4			
- 1000-10000 x 10 <sup>6</sup> BTU/HR		0.28			
- > 10000 x 10 <sup>6</sup> BTU/HR		0.19 20% OPACITY			.18 40% OPACITY
<u>SULFUR DIOXIDE</u>					
- NEW SOURCE > 250 x 10 <sup>6</sup> BTU/HR	1.2				0.2
- EXISTING SOURCE		2.0	3	3	
- 250-2500 x 10 <sup>6</sup> BTU/HR					1.2
- 2500-5000 x 10 <sup>6</sup> BTU/HR					0.5
- > 5000 BTU/HR					0.3
<u>NITROGEN DIOXIDE</u>					
- NEW SOURCE	0.7				
- EXISTING					0.75
(LIGNITE)	0.6 (3)				(EXCEPT LIGNITE)
FOOTNOTES ON NEXT PAGE					



## SUMMARY OF EMISSION REGULATIONS

### FOOTNOTES:

- (1) UNLESS NOTED OTHERWISE, SAME AS FEDERAL
- (2) EMISSIONS IN POUNDS PER  $10^6$  BTU/HR HEAT INF
- (3) TO BE PROPOSED AROUND 8/76

## EMISSION LIMITATION

### COAL PREPARATION PLANTS

- APPLIES TO PLANTS PROCESSING > 200 TONS/DAY
- THERMAL DRYER 0.031 GRAINS/DSCF 20% OPACITY
- PNEUMATIC COAL CLEANING EQUIPMENT 0.018 GRAINS/DSCF 10% OPACITY
- COAL PROCESSING & CONVEYING EQUIPMENT, STORAGE SYSTEM, TRANSFER AND LOADING SYSTEM 20% OPACITY

EXISTING AIR QUALITY  
IN THE NORTHERN PLAINS

DATA SUMMARIES FROM THE NGPRP  
MONITORING NETWORK FOR THE PERIOD SEPTEMBER 1974  
THRU AUGUST 1975.

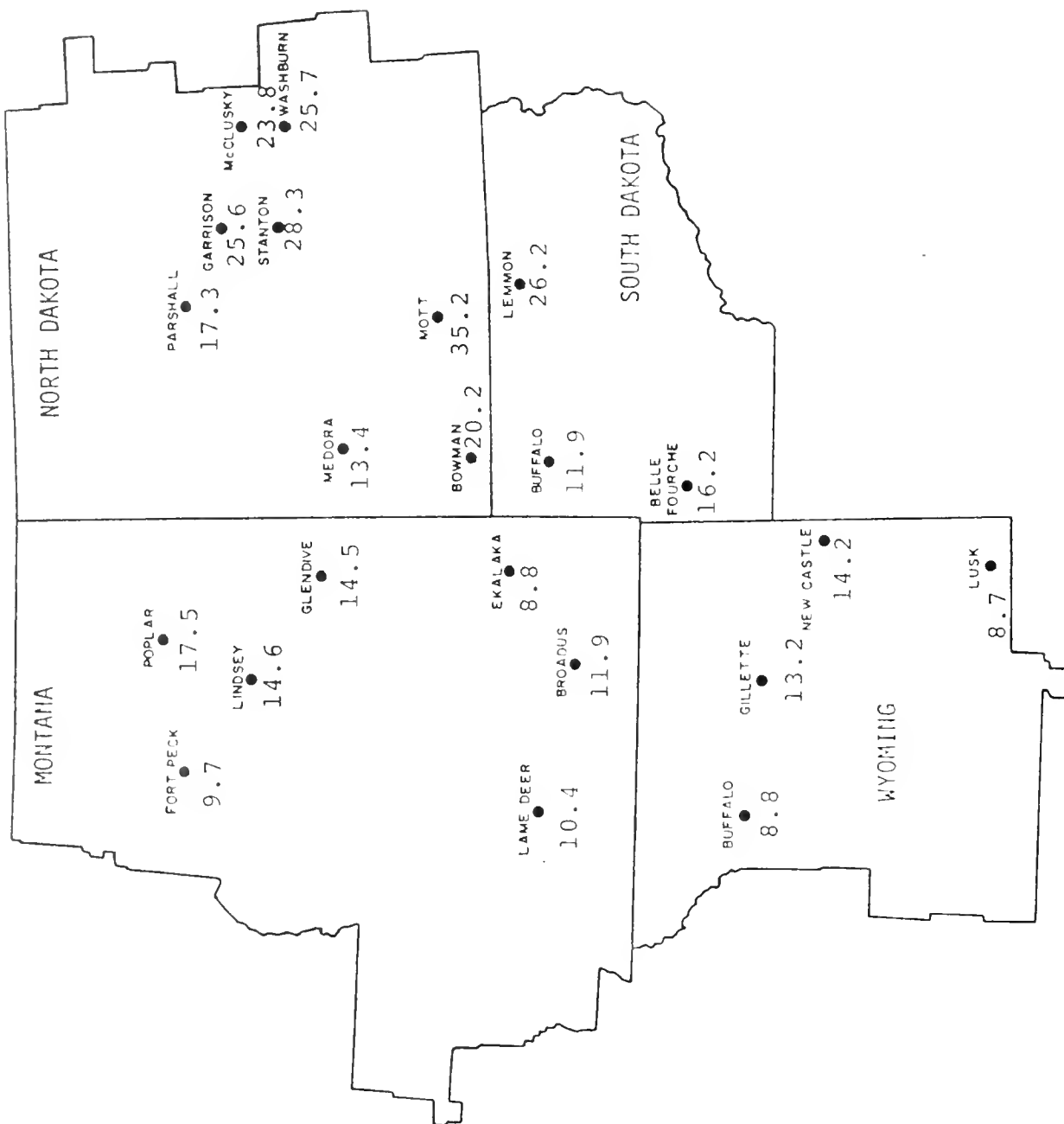


Figure 6.1. Total suspended particulate, annual geometric mean, micrograms/cubic meter.

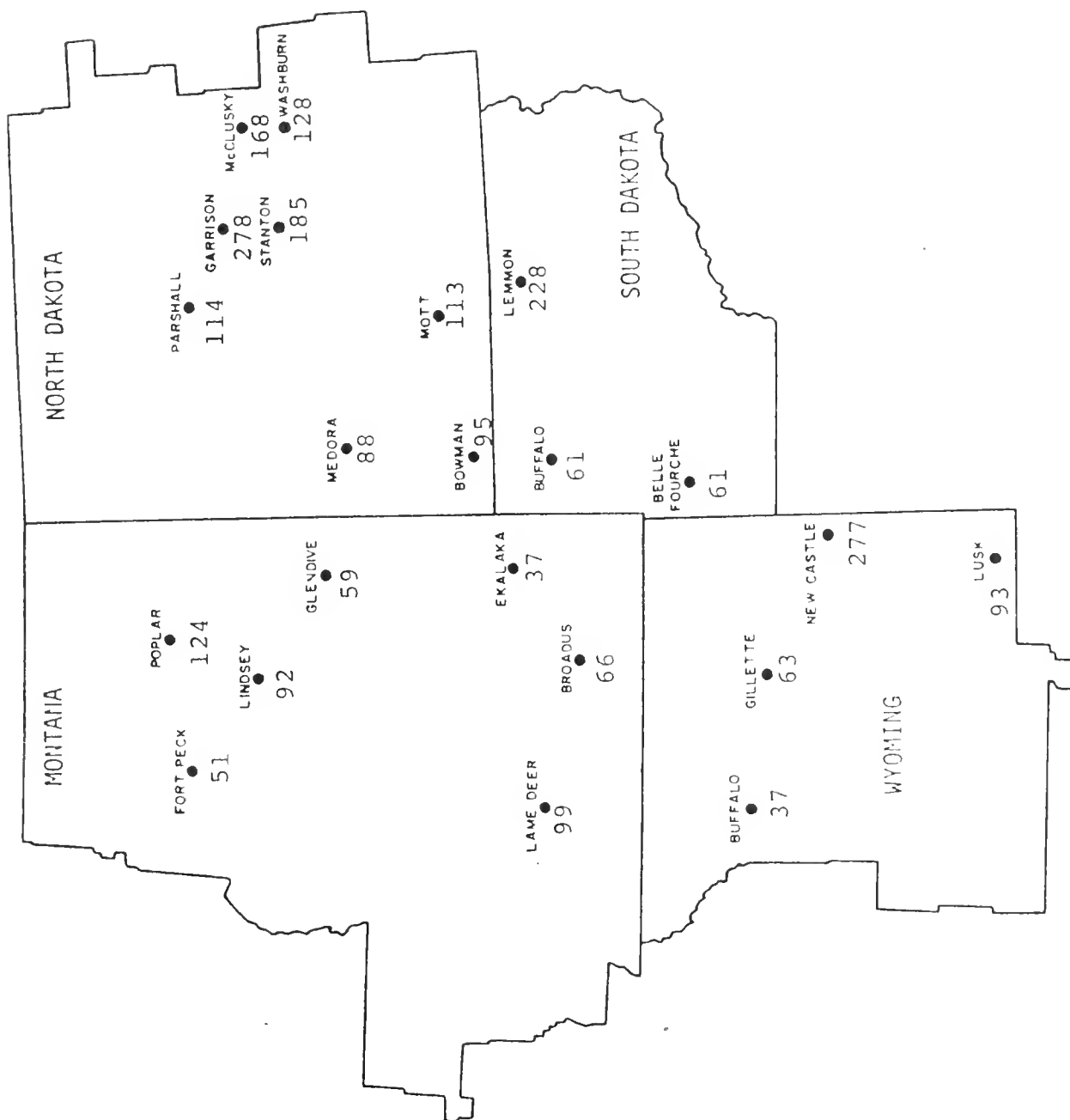


Figure 6.2. Total suspended particulate, maximum 24-hour concentration, micrograms/cubic meters.

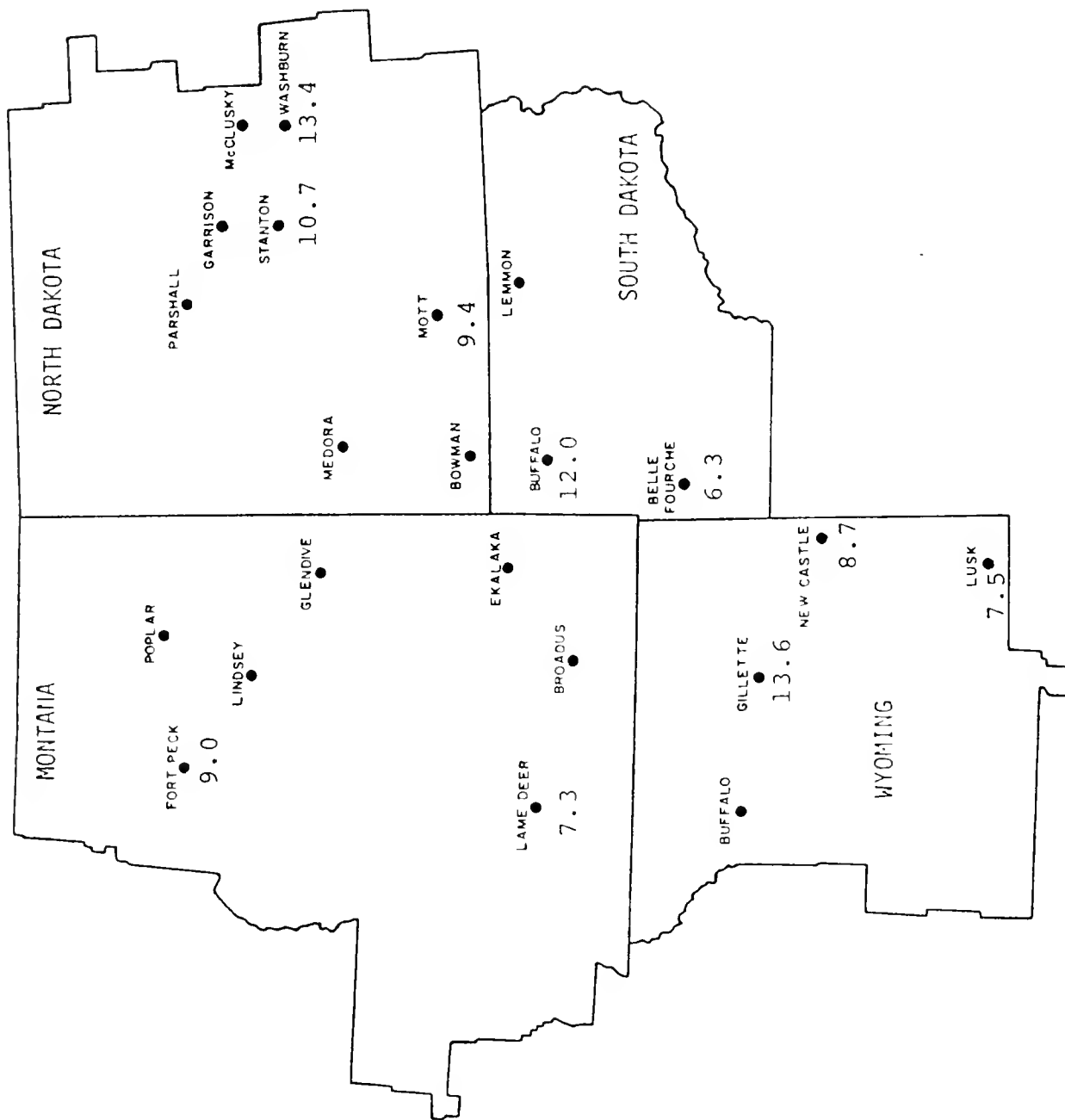


Figure 6.3.  $\text{SO}_2$ , annual arithmetic mean, micrograms/cubic meter

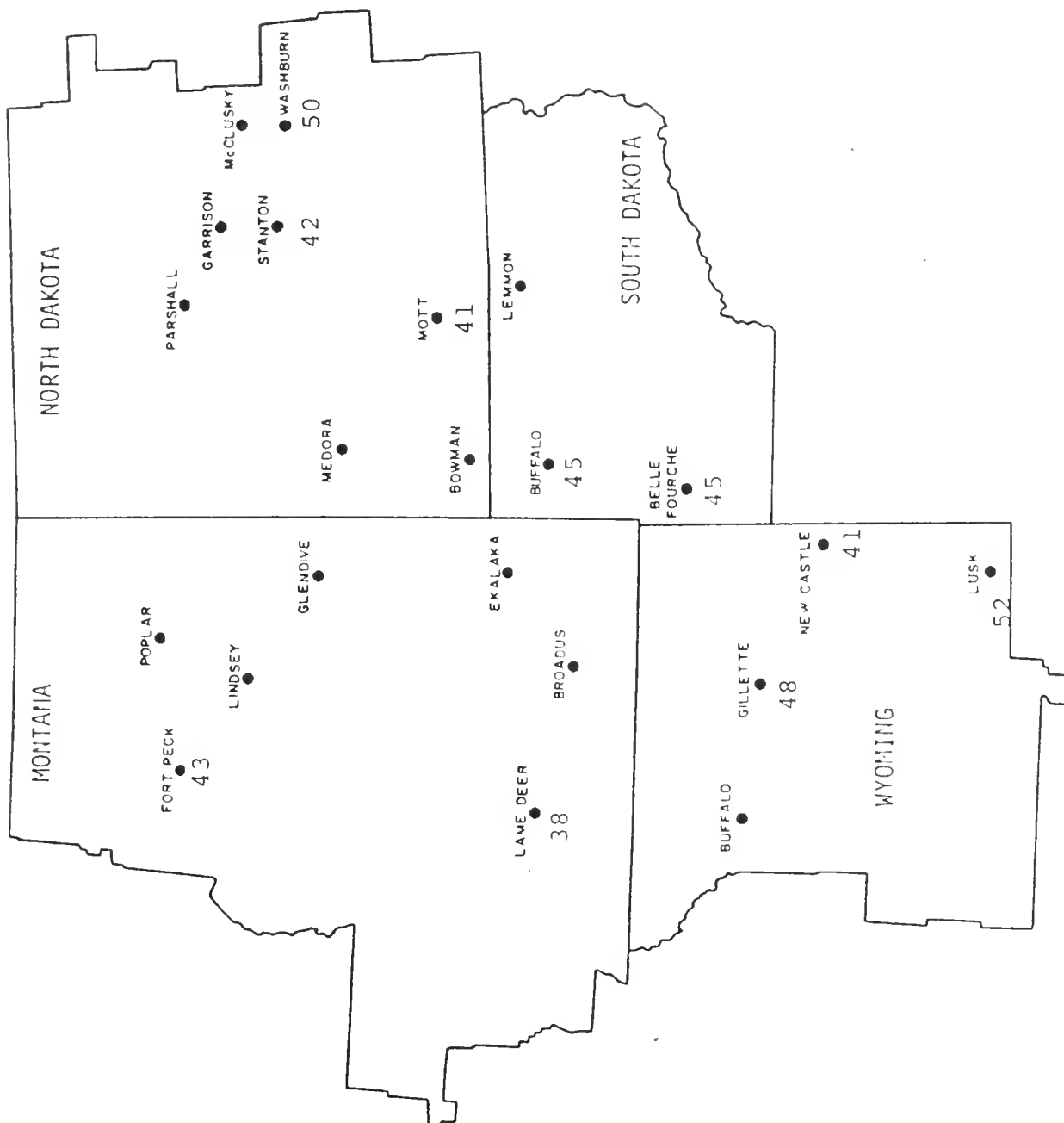


Figure 6.4. SO<sub>2</sub>, maximum 24-hour concentration, micrograms/cubic meter.

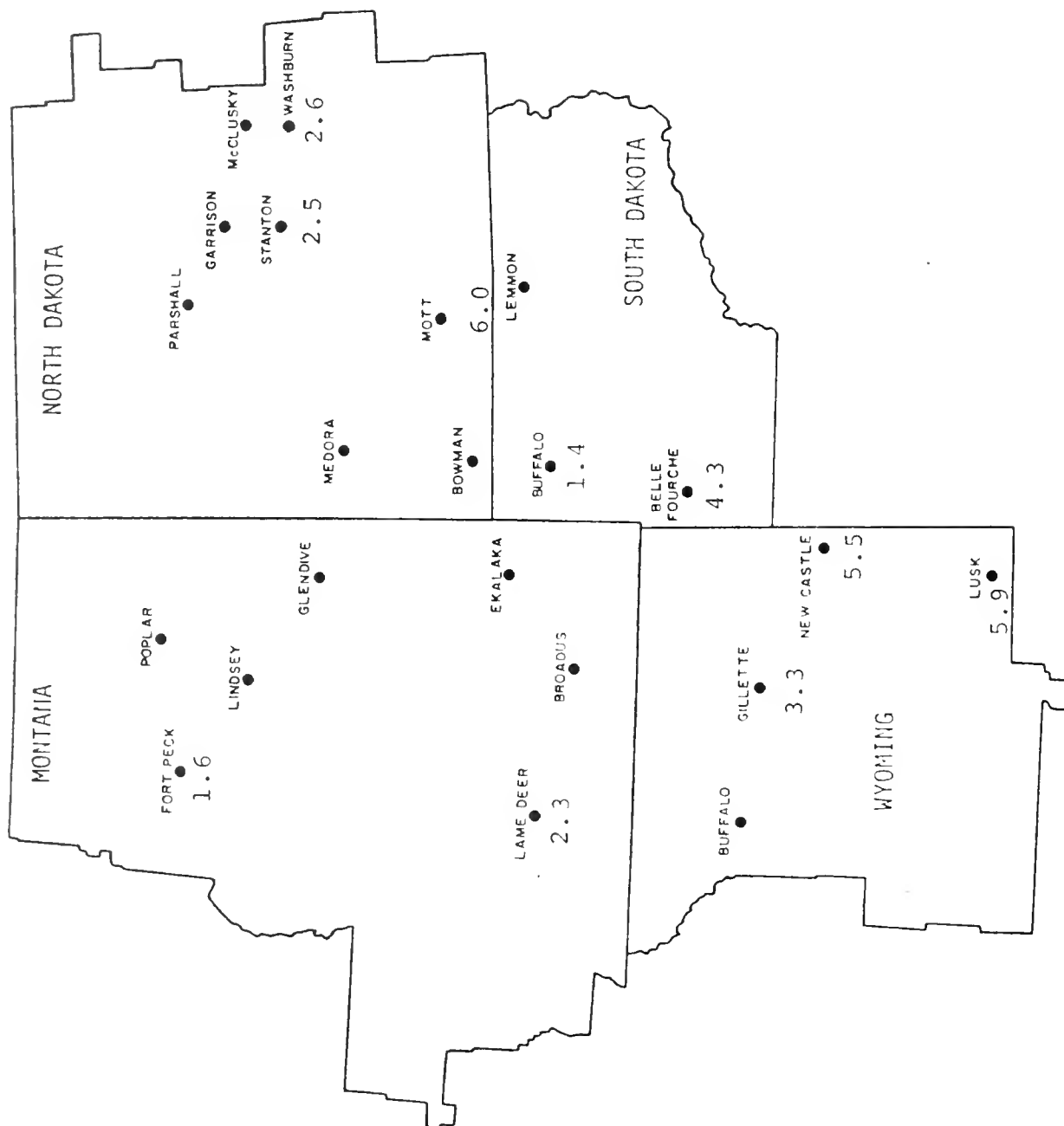


Figure 6.5. NO<sub>2</sub>, annual arithmetic mean, micrograms/cubic meter.



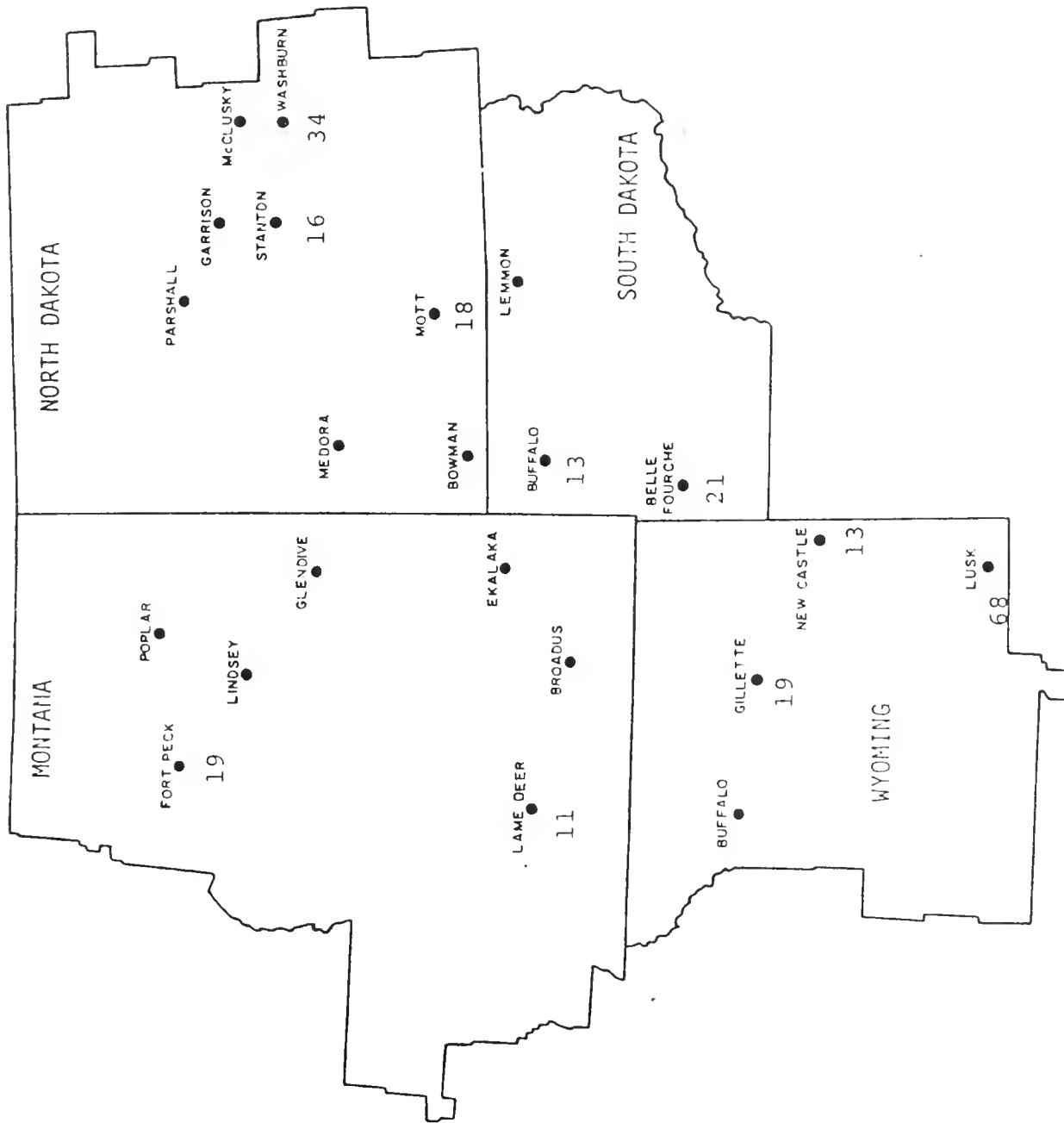


Figure 6.6. NO<sub>2</sub>, maximum 24-hour concentration, micrograms/cubic meter.

Energy/Air Quality Studies

1. States
2. EPA, Region VIII
3. EPA
4. OWRC
5. ERDA
6. REAP
7. Universities, Industry, and ?????

EPA, Region VII

FY '75-'76

1. MONITORING
2. TECHNICAL INVESTIGATIONS
  - METEOROLOGICAL
  - MODELING
  - VISIBILITY
  - TRACE ELEMENTS
  - EMISSION CHARACTERIZATION
3. PLANNING ACTIVITIES
  - AQMA
  - HEALTH IMPACTS
  - PSD

EPA

1. MODELING - Coal Gasification/Oil Shale
2. MODELING - PSD
3. COLSTRIP
4. OZONE - Montana, North Dakota, South Dakota
5. CHESS - Stanton
6. WESTERN ENERGY TECHNOLOGY ASSESSMENT
7. AERIAL PHOTOGRAPHY
8. AIRCRAFT - Meteorology and Air Quality
9. POPLAR
10. TOXIC SUBSTANCES
11. RELATED - e.g., FGD, Trace Element, Coal Gasification

OWRC

1. WEATHER MODIFICATION
2. TRACE ELEMENT
3. COMMUNITY PROJECTS

ERDA

1. COLSTRIP
2. OIL SHALE - Wyoming
3. COAL GASIFICATION - Wyoming  
- Rapid City
4. GRAND FORKS LAB
5. MHD

REAP

1. MONITORING
2. DATA HANDLING
3. METEOROLOGY/CLIMATOLOGY
4. MODELING

UNIVERSITIES

Project Lignite

INDUSTRY

and

????





## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII  
1860 LINCOLN STREET  
DENVER, COLORADO 80203

REF: 8 RC

June 9, 1976

Mr. Michael D. Roach  
Chief, Air Quality Bureau  
Montana Department of Health & Environmental Sciences  
Cogswell Building  
Helene, Montana 59601

Dear Michael:

This is in response to your April 26, 1976 letter regarding the State of Montana's legal authority under the Clean Air Act within Indian reservation boundaries. The questions you raise are difficult ones for which there are few legal precedents and which involve controversial issues of Indian law. EPA is in the process of developing policy on some of the issues you have raised, and I am attaching a draft memorandum regarding Indian law issues currently under circulation within EPA. In the absence of final policy, I will offer my own opinion on the positions the EPA is likely to take regarding your questions.

Your first question concerns the legal authority of the State of Montana to prepare and enforce Air Quality Maintenance Plans for areas within Indian reservation boundaries. This is an exceptionally difficult area of the law. However, based on our discussions with the Solicitor's Office of the Department of Interior, I do not believe that the EPA statutory authority would authorize the states to take action for environmental purposes on at least trust lands within Indian reservations. Thus, a state or areawide Air Quality Maintenance Plan to which an Indian tribe has not acquiesced would not be binding on Indian lands. This is consistent with EPA's position regarding water quality planning (the "208" program) and Indian lands. However, EPA could develop and enforce an Air Quality Plan for the Indian lands.

Since the State of Montana is not a "Public Law 280" state, it is not necessary to answer the more difficult question of whether or not Public Law 280 states would have jurisdiction over Indian lands for environmental purposes.

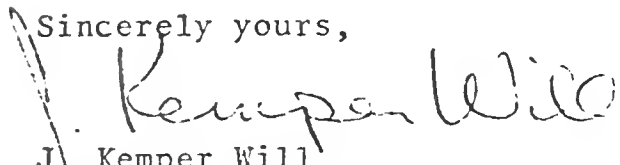
The answer to the second question is similar. EPA statutes do not authorize the states to enforce state or federal standards on Indian trust lands.

The third question asks whether the legal authority of a state may be different with respect to tribal lands as compared to non-tribal lands within an Indian reservation boundaries. I believe that there is a basis for a distinction here, but I leave the definition of the ambit of the state authority to your own Attorney General's opinion. I would, however, suggest that the tribe most likely has concurrent jurisdiction in many of these situations.

Your fourth question concerns the legal responsibility of the State of Montana to monitor air quality within Indian reservation boundaries. As a practical matter, EPA would not expect the State of Montana to be responsible for monitoring air quality within Indian reservation boundaries. However, I think this would be a fruitful area for discussion between the state, the Indian tribes, and EPA with a desirable outcome the development of a cooperative agreement for monitoring responsibilities.

I would be happy to discuss any response you may have to these comments.

Sincerely yours,

  
J. Kemper Will  
Assistant Regional Counsel

## QUESTIONS AND ANSWERS ON EPA'S AUTHORITY REGARDING INDIAN TRIBES

INTRODUCTION

The field of Indian law is unusually complex. Both federal and state courts have attempted to define and interpret the delicate balance between respective assertions of authority by the federal government, the Indian tribes and the states as established by 389 treaties and more than 5,000 pieces of federal legislation. Conflicting case decisions have further led to substantial grey areas of law, with the frequent result that authority can be found to support more than one position on an issue. Therefore, it is difficult to draw reliable generalizations for all Indian tribes in all states.

The nature of Indian tribal powers is marked by three fundamental principles: (1) an Indian tribe possessed, in the first instance, all the powers of any sovereign state; (2) Congress rendered the tribe subject to the legislative power of the United States, and, in substance, terminated the external powers of sovereignty of the tribe, but did not by itself terminate the internal sovereignty of the tribe, i.e., its powers of local self-government; and, (3) these internal powers were, of course, subject to qualification by treaties and by express legislation of Congress, but, save, as thus expressly qualified, the powers of internal sovereignty have remained in the Indian tribe and their duly constituted organs of government.

The interpretation of relative "expressness" can be complicated, both as to whether jurisdiction is granted to states by a given statute and as to the extent of any jurisdiction granted. This document is not intended to resolve all of these complexities, but rather it offers a general framework for EPA staff to use in dealing with Indian environmental issues.

Selected references are provided in the text. Other references are available in the case notes of any United States Code section cited in the Questions and Answers. For general assistance confer: Monroe F. Price, Law and the American Indian, Bobbs-Merrill Co., 1973. Federal Indian Law, U.S. Department of Interior, 1958 (Reprinted in 1966 by Oceana Publications; original version by Felix S. Cohen, 1940).

1. Q. WHAT ARE INDIAN LANDS (COUNTRY)?

A. The term "Indian country...means (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through reservations, (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same." (18 U.S.C. 1151) The type of Indian land may be important. Indian land held in trust by the United States for the benefit of an Indian tribe is accorded special treatment. Lands subsequently purchased by the tribe and in which the United States has no interest may not be guaranteed the same deference. F.P.C. v. Tuscarora Indian Nation, 362 U.S. 99 (1960); U.S. v. Mazurie, 95 S.Ct. 710 (1975).

2. Q. DO EPA ENABLING STATUTES REQUIRE INDIAN TRIBES TO COMPLY WITH FEDERAL POLLUTION STANDARDS?

A. Yes. The general rule is that statutes of general applicability (that is, applying to all persons) will include Indian tribes within their coverage. F.P.C. v. Tuscarora Indian Nation, 362 U.S. 99, 116 (1960). Each of EPA's enabling statutes is of such general applicability. In addition, the FWPCA and the Safe Drinking Water Act both specifically include Indian tribes within the definition of "municipality" and the term "person" includes the term "municipality." The Solid Waste Disposal Act includes Indian tribes within the definition of "municipality" but does not define "person," since the Act is addressed to states and municipalities and not to individual persons.

3. Q. DO EPA ENABLING STATUTES REQUIRE INDIAN TRIBES TO COMPLY WITH STATE POLLUTION STANDARDS?

A. A categorical answer cannot be given. As a general rule, federal statutes which apply to all persons also apply to Indians. However, such statutes do not confer upon states jurisdiction over Indians unless there is express authorization by the statute or other federal enactment. Kennerly v. District Court, 400 U.S. 23 (1971); Williams v. Lee, 358 U.S. 217 (1959).

It is a basic rule of statutory construction regarding Indians that statutes should be construed to the benefit of Indians where the statute is ambiguous regarding applicability to Indians. Antoine v. U.S., 420 U.S. 194 (1975); Choctaw Nation v. Oklahoma, 397 U.S. 620 (1970), reh.denied, 398 U.S. 945; Jones v. Meehan, 175 U.S. 1 (1899); Morton v. Mancari, 417 U.S. 535 (1974).

Following these case holdings and consistent with the Federal policy expressed in the Indian Self-Determination Act, EPA does not interpret its statutes as conferring implementation and enforcement jurisdiction upon states over Indian lands because the statutes do not expressly mention Indians in the provisions which authorize state action.

However, the question is subject to considerable legal debate and there are no cases on point which suggest a resolution.

Where there is a dispute over conflicting Tribal-State jurisdiction, the best position to take is that EPA will not attempt to alter or define the present legal relationship. Thus, where States have not assumed jurisdiction over reservations, EPA will accept, within the constraints of EPA statutes, the proposals by Indian governing bodies of their own pollution standards.

4. Q. WHAT IS THE EXTENT OF JURISDICTION GRANTED UNDER PUBLIC LAW 280?

- A. Civil and Criminal jurisdiction over Indians was conferred on several states by Public Law 280. See Appendix A. Public Law 280 provides that the "laws of such state or territory that are of general application to private persons or private property shall have the same force and effect within such Indian country as they have elsewhere within the state or territory." "Laws of such state" means state statutes and regulations, but not local government or county laws. Santa Rosa Band of Indians v. Kings County, F.2d (9th Cir. No.74-1565, Nov.3, 1975).

Subsection (b) of 18 U.S.C. (criminal) and 28 U.S.C. 1360 (civil) (the codified sections of P.L.280) has caused considerable litigation. Subsection (b) states: "Nothing in this section shall authorize the alienation, encumbrance, or taxation of any real or personal property, including the water rights, belonging to any Indian or Indian tribe...." The term "encumbrance" should be given a broad meaning and is not limited to "clouds on title." Snohomish v. Seattle Disposal Co., 425 P.2d 22 (1967). cert.denied, 389 U.S. 1016 (1967); see also Santa Rosa Band, supra; contra see, Rincon Band of Mission Indians v. County of San Diego, 324 F.Supp. 371 (S.D.Cal. 1971) (overruled by Santa Rosa Band).

It has been held by the Interior Department that P.L. 280 does not invest states with jurisdiction over trust property. Opinion of the Solicitor of the Department of Interior M-36768, Feb. 7, 1969. Whether or not jurisdiction for environmental purposes is conferred by P.L. 280 is a matter that has not been legally resolved.

5. Q. DO ANY OTHER FEDERAL LAWS LIMIT STATE JURISDICTION OVER INDIAN LAND?

- A. 25 C.F.R. §1.4 restricts the applicability of any state or local law "limiting, zoning, or otherwise governing, regulating, or controlling the use or development of any real or personal property...leased from or held or used under agreement with and belonging to any Indian or Indian tribe, band, or community that is held in trust by the United States...." The same section authorizes the Secretary of the Interior to make applicable such laws as may be "in the best interest of the Indian owner or owners...." Only the state zoning ordinances of the State of California have been approved under this regulation. 30 FR 8172, June 22, 1965 (Aqua Caliente); 30 FR 8722, July 2, 1965 (State of California zoning laws applied to reservations.)

25 U.S.C. §231 authorizes the Secretary of Interior to publish regulations which would permit state agents and employees to enter upon tribal lands to inspect health and education conditions, and to enforce sanitation and quarantine regulations and state school attendance regulations against Indians. Since there are currently no Department of Interior regulations implementing this statute, no jurisdiction has been conferred.

6. Q. CAN EPA SET STANDARDS FOR INDIAN LANDS?

- A. Generally, EPA statutes will authorize EPA rulemaking for environmental standards applicable to Indian lands. For example, water quality standards and effluent limitations could be set by EPA for specific reservations under Sections 301-303 of the FWPCA and air quality standards could be set under Section 110 of the Clean Air Act.

Indian tribes possess independent authority to establish their own pollution standards consistent with EPA authority. Colliflower v. Garland, 342 F. 2d 369 (1965). EPA has recognized this power in its regulations regarding "Prevention of Significant Air Quality Deterioration," 40 CFR §52.21 (39 FR 42513, Dec. 5, 1974). At a minimum, EPA could lend technical assistance to tribes in establishing tribal pollution standards.

7. Q. ARE INDIANS SUBJECT TO THE STATE WATER DISCHARGE PERMIT PROGRAM?

- A. Significantly, Sections 402(b) and 405(c), the authority for a state permit program, only authorize state programs for discharges and disposal "within its jurisdiction", a term of art. It appears from this language that states which have EPA approval for a permit program would have permit authority over Indian lands only if independent jurisdiction already exists over Indians in that state. In addition, EPA's regulations regarding NPDES permits address the issue of permits for Indian activity on Indian lands. 40 CFR Section 125.2(a)(2) provides that such an activity will be subject to the federal regulations. However, Section 125.2(b) states, "Such state programs do not cover agencies and instrumentalities of the federal government and Indian activities on Indian lands under the jurisdiction of the United States. The language "under the jurisdiction of the United States" of these regulations is consistent with the language "within its jurisdiction" of Section 402(b) and 405(c).

The permit question is complicated by Section 401(a)(1), which provides that "any applicant for a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the state in which the discharge originates or will originate...." However, the same section provides that "in any case where a state or interstate agency has no authority to give such a certification, such certification shall be from the Administrator." Since 401 is not clear on whether state certification is to be obtained for any Indian activities on Indian lands, it will be best for EPA to treat such activities in the same manner as federal facilities are treated. Therefore, the Administrator will provide the certification except where the state has other independent jurisdiction over the Indian lands where the discharge will originate.

8. Q. DO STATES HAVE AUTHORITY TO DESIGNATE TRIBAL RESERVATIONS AS PART OF A FWPCA SECTION 208 AREA?

- A. Yes. All states were delegated authority by the FWPCA Section 208 to "identify each area within the state" and to "designate (A) the boundaries of each such area, and (B) a single representative organization...capable of developing effective areawide waste treatment management plans for such area." Since the FWPCA - 72 applies to Indian tribes (see question 2) tribal lands could be included in areas designated by a governor. However, the Act does not provide for state enforcement except via the state NPDES permit system. Therefore, where tribal lands are part of a 208 area, the tribe would have to be represented on the planning agency and would have to be designated as a management agency in order for the plan to

satisfy the requirements of Sections 208(b)(2) and (c)(2). A reservation could also be a distinct 208 area, but any designation must be made pursuant to the requirements of Section 208(a)(2), (3), or (4). If the reservation is not designated, it can be included in state planning under Section 208(a)(6). As a matter of policy, the whole reservation, not just a part, should be included in any designated area.

Tribes are eligible for 208 funding in two ways: (a) if the governor of a state designates a reservation as a planning area, then the tribe or a representative tribal organization could be designated as the planning agency and become eligible for funding; if the Governor does not act concerning tribal lands (i.e. does not designate or non-designate), the tribal council could by agreement request EPA approval for designation of the reservation as a 208 area; (b) Funding obligated to the state for statewide planning under §208(a)(6) could be subcontracted to a tribe for those planning functions that relate to the reservation. Section 102(c) also provides 50% funding for basin (or portion thereof) planning at the request of the Governor of a state.

It should be noted that tribes can use funds obtained from the Bureau of Indian Affairs or the Indian Health Service as matching shares for EPA grants (see Indian Self-Determination Act, P.L. 93-638, Section 104(c)).

9. Q. DO STATES HAVE JURISDICTION OVER INDIANS OFF INDIAN COUNTRY?

- A. Generally yes. Case law does not restrict authority of the states with respect to Indian polluters off Indian lands unless Federal law has preempted the matter. Surplus Trading Co. v. Cook, 281 U.S. 647 (1940); Organized Village of Kake v. Egan, 369 U.S. 60, 75 (1962); Mescalero Apache Tribe v. Jones, 411 U.S. 145, 149 (1973); McClanahan v. Arizona Tax Commission, 411 U.S. 164 (1973). Federal matters involve issues about which a Federal statute exists, or which were a subject of a treaty, or about which the Federal government has had a long-standing history of interest. For example, the personal property of Indians, the alienation of Indian realty, and off-reservation fishing rights have been matters of Federal interest. Metlakatla Indian Community v. Egan, 369 U.S. 45 (1962); Puyallup Tribe II v. Dept. of Game, 414 U.S. 44 (1973).



10. Q. COULD STATE POLLUTION LAWS APPLY TO INDIANS UNDER THE PROVISIONS OF THE ASSIMILATIVE CRIMES ACT?

A. The Assimilative Crimes Act, 18 U.S.C. §13, provides that crimes defined under State law shall apply and be enforceable in Federal courts of that state. State-defined offenses committed on Indian lands are specifically included. However, there are numerous exceptions to the Act, the interpretation of which would require an extensive memo in itself. Determinations will have to be made on a case by case basis. See generally, Note, The Federal Assimilative Crimes Act, 70 Harvard L. Rev. 685 (1957).

11. Q. DOES THE FEDERAL WATER POLLUTION CONTROL ACT AUTHORIZE EPA FUNDING OF INDIAN TRIBES FOR POLLUTION CONTROL ACTIVITIES?

A. Yes. Indian tribes or authorized Indian tribal organizations are included in the definition of the term "municipality" in §502, and municipalities are included in the definition of "person." Therefore, wherever the Act authorizes funding to municipalities or persons, Indian tribes will be eligible to receive EPA funds. Squire v. Capoeman, 351 U.S. 1 (1956). The following Federal Water Pollution Control Act sections specifically authorize funding of municipalities or individual persons: 102--authorizes joint investigations with municipalities of the condition of any waters and discharges for the preparation of comprehensive programs for water pollution control; 104--provides broad grant authority for research, investigations, training and information; 105--authorizes grants for research and development of demonstration projects for waste water treatment systems; 107--authorizes grants or contracts for projects to demonstrate elimination or control of mine water pollution; 201--authorizes EPA to make grants for the construction of publicly owned treatment works; however, such works must be certified by the state water pollution control agency as entitled to priority over other public water treatment works in the state.

1.2 Q. DOES THE CLEAN AIR ACT AUTHORIZE CONTRACTS OR GRANTS TO INDIAN TRIBES?

A. Indian tribes are not specifically mentioned in any definition of the Clean Air Act. Neither the definition of state nor of municipality would permit an interpretation to include Indian tribes. However, a broad reading of the term "air pollution control agency" would permit Indian tribes to be included within this definition. See Squire v. Capoeman, 351 U.S. 1 (1956).

Section 302(b)(3) provides that the term "air pollution control agency" includes, among others, "a city, county, or other local government authority, or, in the case of any city, county, or other local government in which there is an agency other than the health authority charged with the responsibility for enforcing ordinances or laws relating to the prevention and control of air pollution, such other agencies." Under this interpretation the following section of the Clean Air Act would authorize the Administrator to contract with or make grants to Indian tribes. Section 103(a)(3) authorizes EPA to conduct investigations and research and to make surveys concerning air pollution problems in cooperation with air pollution control agencies. Section 103(b) also authorizes training grants. Section 105(a)(1)(A) authorizes the Administrator to make grants to air pollution control agencies for planning, developing, establishing and improving or maintaining programs for the prevention and control of air pollution or implementation of national primary and secondary air quality standards.

Caveat. A November 3, 1975 letter from Russell E. Train to Senator Domenici seems to take a contrary position. "EPA's basic regulations for developing State Implementation Plans under Section 110 of the Act, and for providing Federal grant support for air pollution control agency programs under Section 105 of the Act, do not have provisions for Indian lands."

13. Q. DOES THE FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT (FIFRA) AUTHORIZE CONTRACTS OR GRANTS TO INDIAN TRIBES?

- A. No. The term "state" as defined in FIFRA does not include Indian tribes, and there is no definition of municipality or of any other term which would include the definition of Indian tribe in the Act. Section 23 is the only section dealing with contracts or grants and speaks only in terms of assistance to states; however, both Section 22 and 23 authorize the Administrator to cooperate with other Federal agencies (such as BIA) and enter into contracts with them for carrying out the purposes of the Act for the training or certified applicators.

14. Q. DOES THE NOISE CONTROL ACT OF 1972 AUTHORIZE CONTRACTS OR GRANTS WITH INDIAN TRIBES?

- A. All Provisions of the Noise Control Act which relate to non-Federal activities speak in terms of states or political subdivisions thereof. The term "state" does not include Indian tribes and there is no other definition which would permit an interpretation to include Indian tribes. §14 authorizes the Administrator to conduct research and finance research by contract with any person on the effects and control of noise. The same section authorizes technical assistance to state and local governments but does not mention grants or contract funding. A broad interpretation of local government under this section could include Indian tribes. §4 authorizes the Administrator to coordinate and cooperate with other federal agencies.

15. Q. DOES THE SOLID WASTE DISPOSAL ACT, AS AMENDED 1970, AUTHORIZE CONTRACTS OR GRANTS WITH INDIAN TRIBES?

A. Yes. The definition of municipality specifically includes Indian tribes. Therefore, the following sections of the Solid Waste Disposal Act authorize contracts or grants to Indian tribes: 204--requires the Administrator to cooperate with and lend financial assistance to, among others, municipalities in the conduct of research, investigations, experiments, training, demonstrations, surveys and studies relating to solid waste disposal; 207--authorizes the Administrator to make grants for the purpose of preparing surveys, proposals and plans for solid waste disposal and for planning programs for the removal and processing of abandoned motor vehicles; 208--authorizes grants or contracts for the operation of any project by eligible organizations to develop or carry out a program of training in solid waste management; 201--authorizes grants for training projects.

16. Q. DOES THE SAFE DRINKING WATER ACT AUTHORIZE CONTRACTS OR GRANTS TO INDIAN TRIBES?

A. Yes. The term "municipality" as defined in §1401 specifically includes Indian tribal organizations and the term "person" includes municipalities. The terms "supplier of water" and "public water system" would also include Indian members or tribes and tribal water systems within their definition. Therefore, §1442, which authorizes the Administrator to provide technical assistance to states and municipalities and which authorizes grants or contracts with any public agency, educational institution and any other organization for developing and carrying out programs for training and for developing and expanding the capabilities to carry out the purposes of the Act would be applicable to Indian tribes. Section 1442(b)(3)(C) would authorize the Administrator to make grants to tribes for the same purposes he would make grants to states under Section 1443, which does not apply to Indian tribes. §1444--authorizes grants of any purpose for demonstration projects; §3--authorizes the Administrator to enter into arrangements with public or private entities to conduct surveys on the quantity and availability of rural drinking water supplies.

17. Q. DO INDIAN TRIBES HAVE JURISDICTION OVER NON-INDIAN PERSONS?

- A. Acts involving activities which are defined as criminal under state law by a non-Indian which affect only a non-Indian or a non-Indian interest are generally held to be within the jurisdiction of state courts. U.S.v.McBratney, 104 U.S. 621 (1882). However, the jurisdiction of tribal courts over activities which are defined as criminal under tribal law by non-Indians which affect Indians or Indian interests is a matter of considerable legal debate at this time. The law must be considered under the following categories: (a) application of federal statutes (b) civil vs. criminal jurisdiction and (c) trust lands vs. non-Indian fee patented lands.

a. The sovereign power of internal self-government belongs to the tribes except as expressly limited by the plenary power of the United States through Congressional enactments. McClanahan v. Arizona Tax Commission, 411 U.S. 164 (1973). Such enactments are discussed in questions 3, 4, and 5. Where there is no preemptive federal statute, the tribes are free to exercise their inherent powers. Most Indian treaties reserve to the tribes the power to exclude non-members from the reservation, subject, however, to due process. Dodge v. Nakai, 298 F.Supp. 17, 26 (D.Ariz.1968). See also Indian Civil Rights Act, 25 U.S.C. 1302.

b. In matters of civil jurisdiction, case law is clear that where jurisdiction has not been expressly given to a state by federal statute, a tribe may exercise jurisdiction over claims by non-Indians against Indians arising from transactions within the reservations. Williams v. Lee, 358 U.S. 217 (1959); Kennerly v. District Court, 400 U.S. 23 (1971). In matters of criminal jurisdiction, the law is eminently unclear. Surprisingly, there have been no Federal cases directly on point until two recent District Court cases, which are currently on appeal. Belgarde v. Morton, unreported (W.D.Wash. No. C74-6835. Aug.18, 1975); Oliphant v. Schlie, unreported (W.D.Wash. April 5, 1974), appeal pending, 9th Circuit. No. 74-2154. Both cases found Indian jurisdiction over minor, criminal offenses committed by non-Indians. Subsequent to these cases, the Department of Interior has withdrawn a 1970 Solicitor's opinion which took the position (on questionable legal grounds) that tribes had no jurisdiction in such cases. Several tribal code provisions or ordinances extending criminal jurisdiction to any person within the reservation currently are awaiting Department of Interior approval. 25 U.S.C. §§1301-1303 provides that Tribal Courts may not impose sentences of greater than six months or fines of more than \$500. 18 U.S.C. 1153 provides for exclusive federal jurisdiction over specified major crimes. See also 18 U.S.C. 1152.

c. Tribal civil jurisdiction applies to all reservation lands. Under the above referenced District Court decision of Oliphant, tribal criminal jurisdiction applies on tribal lands, but no decision was tendered regarding fee patented lands within reservations. However, Belgarde held tribal criminal jurisdiction to be effective within the entire reservation. Confer, Colliflower v. Garland, 342 F.2d 369 (1965).

18. Q. WHAT EFFECT DO INDIAN TREATIES HAVE TODAY?

A. Treaties between Indian tribes and the United States are still recognized in Federal law as the "supreme law of the land," equivalent to an act of Congress. United States Constitution, Article VI. Congress possesses the power to abrogate treaty provisions by specific legislative enactment, except that Indian rights vested by treaty cannot be divested by later act of Congress. Lone Wolf v. Hitchcock, 187 U.S. 553, 565 (1903). Treaties should be interpreted as the Indians understood them, and ambiguities are to be resolved in favor of the Indians. Confederated Salish and Kootenai Tribes, Montana v. Moe, 392 F. Supp. 1297, 1315 (1975); Menominee Tribe v. U.S., 391 U.S. 404 (1968).

19. Q. ARE INDIAN TRIBES, AS A GOVERNING BODY, SUBJECT TO SUIT IN COURTS OF COMPETENT JURISDICTION?

A. Indian tribes, as an attribute to their sovereignty, are immune from suit, either in Federal or State Courts, without Congressional authorization or consent of the Tribe. Morgan v. Colorado River Indian Tribe, 443 P. 2d 421 (Arizona Supreme Court 1968). This immunity may not be evaded by suing the United States as trustee or guardian for the Tribe, or by suing tribal officers for actions taken by them within the scope of their duties. Turner v. U.S., 248 U.S. 354, 359 (1919). 25 U.S.C. §1322 (Title IV of the 1968 Civil Rights Act) does not seem to extend Congressional consent to suing tribes, since it only speaks of "causes of actions between Indians or to which Indians are parties," and does not mention tribes as parties.

20. Q. MUST THE INTERIOR DEPARTMENT PREPARE ENVIRONMENTAL IMPACT STATEMENTS FOR SIGNIFICANT ACTIONS TAKEN REGARDING INDIAN LANDS?

A. The scope of the NEPA has been consistently held to be very broad. The cases have held that where a federal license or permit is involved or where regulatory approval of an action (for example, lease of Indian lands by an Indian tribe) is required that approval constitutes a major federal action. At least in these situations, the Department of Interior would be required to prepare an EIS where significant environmental impacts of the action would be predicted. Davis v. Morton, 469 F. 2d 593 (10th Cir. 1972).

21. Q. ARE INDIAN TRIBES REQUIRED TO PREPARE ENVIRONMENTAL IMPACT STATEMENTS?

A. Although there have been to this point no cases deciding this issue, it is unlikely that an Indian tribe would be considered a federal agency. It is therefore our opinion that Indian tribes do not have to prepare an EIS for any of their activities.

22. Q. IS EPA SUBJECT TO THE INDIAN SELF-DETERMINATION ACT?

A. The declaration of policy contained in the Indian Self-Determination Act (P.L.93-638, 25 U.S.C. 450) applies to all Federal actions. Congress committed itself to the "establishment of a meaningful Indian self-determination policy which will permit an orderly transition from federal domination of programs for and services to Indians to effective and meaningful participation by the Indian people in the planning, conduct and administration of those programs and services."

Section 7(b) requires EPA to provide for Indian preference in its contracts or grants to Indian organizations or for the benefit of Indians.

"(b) Any contract, subcontract, grant, or subgrant pursuant to this Act, the Act of April 16, 1934, (48 Stat. 596), as amended, or any other Act authorizing Federal contracts with or grants to Indian organizations or for the benefit of Indians, shall require that to the greatest extent feasible--

(1) preference and opportunities for training and employment in connection with the administration of such contracts or grants shall be given to Indians; and

(2) preference in the award of subcontracts and subgrants in connection with the administration of such contracts or grants shall be given to Indian organizations and to Indian-owned economic enterprises as defined in section 3 of the Indian Financing Act of 1974 (88 Stat.77)".

With the exception of a few minor personnel provisions, the other provisions of the Indian Self-Determination Act will not affect EPA's programs or statutory authority. However, the language of the Act could provide for fruitful intergovernmental coordination with the Indian Health Service and the Bureau of Indian Affairs in providing for environmental control on Indian lands.

J.Kemper Will  
Assistant Regional Counsel  
EPA Region VIII Denver

Minutes

of the

FORT UNION REGIONAL TASK FORCE ON  
AIR QUALITY TASK FORCE

Meeting of Thursday, June 10, 1976  
Room A-15, State Capitol Building  
Pierre, South Dakota

The organizational meeting of the Task Force on Air Quality was called to order by Moderator Allyn Lockner at 8:25 a.m., June 10, 1976, in Room A-15, State Capitol Building, Pierre, South Dakota. The following persons "present" were in attendance for all or a portion of the meeting:

Members present:

Montana Representative Howard Ellis  
Montana Representative Sam Wolfe  
Mr. Mike Roach, Montana  
North Dakota Representative Corliss Mushik  
North Dakota Senator Stella Fritzell  
Mr. Willis Van Heuvelen, North Dakota  
South Dakota Senator Frances LaMont  
South Dakota Senator Eugene Mahan  
Dr. Allyn Lockner, South Dakota  
Dr. Richard Schluesener, South Dakota  
Mr. Randolph Wood, Wyoming  
Mr. U. S. Archibald, Wyoming

Members absent:

Montana Senator Dave Manning  
Montana Senator Jack Galt  
Mr. Ed Danks, North Dakota  
Dr. J. Ramirez, North Dakota  
South Dakota Representative Joel Rickenbach  
Wyoming Senator Glenn Rogers  
Wyoming Representative John Hursh  
Dr. Bill Edwards, Wyoming

Others present:

Ms. Sheila Miedema, Project Coordinator, Bismarck, North Dakota  
Mr. Terry Thoem, U.S. Environmental Protection Agency, Region VIII,  
Denver, Colorado  
Mr. Lou Johnson, U. S. Environmental Protection Agency, Region VIII,  
Denver, Colorado  
Mr. Ed McGuire, State Planning Bureau, Pierre, South Dakota  
Mr. Bob Pipe, Department of Environmental Protection, Pierre, S.D.  
Mr. Steve Merrick, Legislative Research Council, Pierre, S.D.  
Mr. James Waggoner, Legislative Research Council, Pierre, S.D.  
Ms. Phyllis Mensing, Associated Press, Pierre, South Dakota  
Mr. Bill Johnson, Investor Owned Electric Companies, Pierre, S.D.

Ms. Rochelle Smith, Coordinator, Indian Affairs, Pierre, S.D.

Mr. G. Richard Ruddell, Executive Director, South Dakota Land Association, Pierre, S.D.

Ms. Lonnie Langenfeld, Legislative Research Council, Pierre, S.D.

Moderator Lockner gave background information on the development of the task force and its objectives. He cautioned that the task force be mindful of the effects of energy development in other areas, hence the reason for the establishment of the other Fort Union Coal Conference task forces.

#### Adoption of Rules and Procedures

Quorum--MR. ARCHIBALD MOVED, SECONDED BY SENATOR MAHAN, THAT A QUORUM BE CONSTITUTED OF EIGHT (8) MEMBERS, TWO (2) FROM EACH STATE. MOTION PREVAILED ON A VOICE VOTE.

Rules of Procedure--DR. SCHLUESENER MOVED, SECONDED BY MR. VAN HEUVELEN, THAT ROBERTS' RULES OF ORDER BE FOLLOWED. MOTION PREVAILED ON A VOICE VOTE.

Proxy--SENATOR FRITZELL MOVED, SECONDED BY MR. ARCHIBALD, THAT PROXIES MAY BE USED BUT THAT THE PROXY SHOULD BE AS CLOSELY IDENTIFIED WITH THE MEMBER'S POSITION AS POSSIBLE. MOTION PREVAILED ON A VOICE VOTE.

#### Election of Officers

SENATOR MAHAN MOVED, SECONDED BY SENATOR FRITZELL, THAT DR. LOCKNER BE NOMINATED FOR CHAIRMAN OF THE TASK FORCE.

SUBSTITUTE MOTION BY MR. ARCHIBALD, SECONDED BY MR. WOOD, THAT NOMINATIONS CEASE AND THAT A UNANIMOUS BALLOT BE CAST FOR DR. LOCKNER. MOTION PREVAILED ON A VOICE VOTE.

REPRESENTATIVE MUSHIK MOVED, SECONDED BY MR. WOOD, THAT MR. VAN HEUVELEN BE NOMINATED FOR VICE CHAIRMAN OF THE TASK FORCE.

SUBSTITUTE MOTION BY SENATOR FRITZELL, SECONDED BY SENATOR MAHAN, THAT NOMINATIONS CEASE AND A UNANIMOUS BALLOT BE CAST FOR MR. VAN HEUVELEN. MOTION PREVAILED ON A VOICE VOTE.

MR. WOOD MOVED, SECONDED BY SENATOR MAHAN, THAT MS. LONNIE LANGENFELD BE DESIGNATED AS THE PERMANENT RECORDING SECRETARY FOR THE TASK FORCE. MOTION PREVAILED ON A VOICE VOTE.

Following introductions, Ms. Miedema gave brief background remarks on the establishment of the task forces.

#### Update on Coal Development in the Northern Great Plains States

Following a review of the agenda for the presentation, Mr. Terry Thoem, United States Environmental Protection Agency, Office of Energy Activities, stated that the key uncertainty is the rate in increase in energy demand. Using a slide presentation, Mr. Thoem noted the eight entities that have made projections as to the coal demand. The coal resources in the six-state region did not generate as much coal in 1974-75 as was used--some 60 million tons for 1974 and 66 million tons per year for 1975. Fifty-five million tons were produced in 1974. He cited production and usage figures for the states of Montana, North Dakota, South Dakota, and Wyoming. He then displayed a map showing the locations of the coal resources throughout the nation.



Turning to generating capacity, Mr. Thoem referred to information from the Northern Great Plains Resource Project based on (1) in-region needs; (2) most probable development desired to satisfy some of the midwestern market; (3) including major shortfalls of oil production, nuclear production, and lack of any type of conservation measures; and (4) 1985 timeframe as proposed by the Environmental Protection Agency. He compared the actual 1973 production with the projections for Montana, North Dakota, South Dakota, and Wyoming for 1985 and 2000. Per day usage is approximately two (2) kw per person per year; it is projected to increase to seven (7) kw by 1985. There are fairly considerable increases in generated capacity projected for all four states. The amount of air quality degradation can be linked to certain emissions from power plants.

Mr. Thoem then gave a brief overview of the various studies which have been conducted and the basic assumptions which came out of those studies. He left a copy of the summary of the Northern Great Plains Study for the task force's perusal. This study projects production to increase four-fold by 1985. Upon questioning by Representative Mushik, Mr. Thoem responded that the projections do take into consideration the mix of energy and do not base their assumptions on coal being the only source of energy.

Mr. Thoem cited production figures from the various coal mines throughout the states of North Dakota, Montana, and Wyoming. He stressed the need to reference these figures back to 1971 figures--coal production is rapidly increasing.

Turning to a slide presentation of some of the projections from the Northern Great Plains Study Program, Mr. Thoem noted that there has been a decrease in the total energy consumed in the United States. He pointed out that eastern coal mining is more expensive than mining in Montana, Wyoming, and North Dakota. The cost to transport the coal mined in those states to the market area where it is needed is quite high. Northern Great Plains coal is better in regard to pollutant emitters, however, than is some of the eastern coal. In regard to methods of shipping coal, Mr. Thoem stated that economics of slurry lines are not known; it is known what it costs to ship coal via rail, however. The study showed that if coal were shipped in a slurry pipeline, it was cheaper than shipping by rail. This is based on a one-way line and does not include the cost of losing the water.

Speaking to the quality of coal, the cost tends to come out about the same when scrubbers are put on for sulphur dioxide if shipping midwestern coal. Most of the shipping of coal is to the southern and eastern portions of the country. He then noted the reclamation costs. He explained that a resource is quite undefinable and is in the ground; a reserve is defined and is easily accessible. He showed a comparison of the mineral reserves in the Northern Great Plains area and the reserves in the entire nation. About two percent of the land area of the Northern Great Plains is under laid by surface minable coal. This is a small percentage of land. The largest percentage of the land is owned by private individuals. Coal production from private ownership is greater than production from federal or state-owned lands. Upon questioning by Senator Fritzell, Mr. Thoem stated that this situation will reverse itself when the moratoriums are lifted. Senator Fritzell noted the Department of Interior's philosophy of "develop or lose your lease."

Discussion and questions followed the coal scenario presentation. Dr. Lockner noted that coal reserves are contingent upon the price of coal. The price of oil will have an impact on the coal development plans. Also, the development of alternative sources of energy will have an impact on coal development. He stressed that many forces are at work simultaneously that are difficult to predict in regard to coal development. Mr. Thoem noted that much of the coal from the Northern Great Plains will be used in power plants. He felt that the projections on how much coal is going to be produced are better from this standpoint. A more critical question is what is the increase going to be in the use of electricity. Upon questioning by Chairman Lockner, Mr. Thoem stated that electric companies have not changed their basic philosophy of pricing. It is still tied to the

theory of the more you use the less you pay. He stated that if the price of energy goes up, the reserves will decrease. Upon questioning by Senator Mahan, Mr. Thoem stated that domestic production is decreasing.

The Chair asked that Mr. Thoem make available copies of the slide presentation for the task force members.

### Air Quality Considerations

Mr. Lou Johnson, Air and Hazardous Materials Division, spoke to air quality standards and explained what is meant by "ambient" and "emissions." He explained that air quality standards are mandated by the Clean Air Act. Most of the areas in Region VIII are well below the ambient standards at this time. He spoke to some of the effects expected from various pollutants. Impact areas include health, vegetation, materials, visibility, and climate. The secondary standard is a more stringent standard for particulate matter. Primary standards are health related, and secondary standards are welfare related.

Mr. Johnson stated that there are numerous ambient standards. He referred to a summary of regulations for the four-state area. A state cannot have any less stringent standards than the federal standards. He noted that in regard to sulphur oxides, the federal government has promulgated ambient standards for sulphur dioxide. He noted that there is quite a difference in the standards between the four states, especially in the control of emissions. He pointed out that the main emphasis is placed on achieving the primary standards. Mr. Johnson then explained the emission regulations for Montana, North Dakota, South Dakota, and Wyoming as compared to the federal standards.

Turning to air quality maintenance, the areas identified as energy air quality maintenance areas were pointed out. Mr. Johnson then explained the concept of the three classes related to air quality standards. The state, a federal land manager, or a tribal government can request a classification of lands within a state. Reference was made to the proposed Moss and Baker Amendments and their implications. Chairman Lockner questioned how different classes are reconciled, to which Mr. Johnson responded that a higher increment cannot violate a lower increment; a higher increment could wipe out the lower increment within its area of influence, however. This applies both interstate and intrastate. Adjacent states can request arbitration on a request for reclassification.

Mr. Johnson then addressed the proposed Clean Air Act amendments in regard to interstate conflicts and energy development. He explained the House and Senate versions of the prevention of significant deterioration and the important identifiable differences.

Meeting recessed at noon and reconvened at 1:00 p.m.

### Siting Regulations

In regard to siting regulations, the Chair called for comments from the various states. Mr. Mike Roach gave an overview of Montana's siting regulations. The Department of Natural Resources and Conservation administers the state Act. He pointed out the provisions of the Act; the most important sections of the Act relate to the citizen Board of Natural Resources. The board has the authority to grant certificates for construction. The board cannot certify a facility unless the Department of Health certifies that a facility will meet all air and water standards. Upon questioning by Mr. Merrick, Mr. Roach stated that the Act covers nuclear development as well as coal development. Upon further questioning, Mr. Roach responded that he did not know of any plans that have been denied under this program.

North Dakota's program was outlined by Mr. Van Heuvelen. The statute sets the criteria for transmission lines and provides for a great deal of public input. The North Dakota

statute is financed by a charge of \$500 for each \$1 million of investment by the utility. The three permits involved are the water permit, the public service siting permit, and the health department's permit.

Mr. Randolph Wood explained the Wyoming legislation in regard to energy siting facilities. The Act established a siting council within the Governor's office. He explained the fee system. The council has the authority to issue a permit with no conditions, a permit with various conditions, or to reject a permit pending further investigation. Need is a major consideration on which the decision to grant a permit is based.

Chairman Lockner reported that South Dakota does not have any siting provisions at this time.

### Existing Air Quality - Monitoring Findings

Mr. Johnson referred to data summaries from the Northern Great Plains Resource Program's monitoring network for the period September 1974 through August 1975 (on file). Copies of South Dakota's data were distributed to task force members (on file).

### Current Studies of Air Quality in Energy Development Areas

Mr. Thoem noted that the individual states, the Environmental Protection Agency (EPA), Region VIII, the National Environmental Protection Agency, the Old West Regional Commission, the Energy Resource Development Agency, the Regional Environmental Assessment Program (REAP), and universities and other organizations have conducted studies of air quality in energy development areas. He explained the programs conducted by the various agencies. He stressed the importance of having adequate meteorological data. The Region VIII EPA has contracted for a study on the effects of emissions downwind and methodology for such. It is hoped that the study will give a better indication of what regional air quality standards should be. Chairman Lockner questioned the potential policy implications of the various studies that are being conducted. Mr. Thoem felt the utility of the studies was in identification of the impacts from energy development. He felt it was the individual state's decision on what the policies should be in regard to energy siting and development.

### Summary and Identification of Issues

Mr. Johnson pointed out the potential problems of the Indian tribes wanting to be reclassified in regard to air quality mandates. He did not feel that too much emphasis can be placed on quality assurance when making policy decisions. He felt it would be desirable to consider the feasibility of some system of review by the four states in regard to non-attainment. He noted the numerous planning programs that are being conducted and the need to insure that efforts in the various areas are compatible; for example, in water and air quality programs. He stated that "significant deterioration" has a great impact on land use programs. Mr. Johnson felt that the key issue in terms of air quality is that the initiative in air quality planning lies with the states.

Mr. Thoem stressed that the non-attainment area is a critical issue. Another important area deals with visibility and aesthetics; this policy also lies with the states.

### Topics of Discussion and Concern

General discussion was held on the direction of the task force and its objectives. Senator Fritzell noted the importance of first knowing what action is going to be taken on the Federal Clean Air Act. Mr. Van Heuvelen felt that the group should work on overall state policy in regard to the area classification problem regardless of the federal policy.

Senator LaMont was of the opinion that the information exchange system should be addressed and continued. Air quality common goals can also be conducted by the four states.

The following areas of study were brought out in discussion:

- Watch federal action (Moss Amendment)
- Interstate cooperation on class designation
- Information exchange on state laws and regulation
- Precipitation changes
- Short-term standards that are exceeded due to high winds
- Fugitive emissions from coal mining activities as a joint review effort
- Question of state Indian reservations
- Public information and relations effort
- Joint quality assurance to insure interstate comparability.

Prior to prioritization of the study areas, Dr. Schluesener gave a brief presentation on information relating to inadvertent weather modification. (Supporting documents for Dr. Schluesener's presentation are on file.) The document pointed toward the theory that there are changes in precipitation due to particles when a low moisture situation exists. This operates in an opposite direction when a low moisture situation does not exist. He stressed that there is a need to study and predict precipitation changes. Dr. Schluesener expressed concern over the lack of support for solving this problem.

#### Prioritization of Areas of Concern

MR. ROACH MOVED, SECONDED BY SENATOR LAMONT, THAT INTERSTATE COOPERATION ON CLASS DESIGNATIONS BE THE TOP PRIORITY OF THE TASK FORCE DELIBERATIONS. MOTION PREVAILED ON A VOICE VOTE.

Dr. Schluesener suggested that the residual be prioritized by the consensus of the group, based on written indication of preference, which procedure was agreed to by the task force. The results of the tabulation were as follows:

- (2) Information exchange on state laws and regulations
- (3) Watch federal action
- (4) Joint quality assurance to insure interstate comparability
- (5) Fugitive emissions from coal mining activities as a joint review effort
- (6) Question of state Indian reservations
- (7) Public information and relations effort
- (8) Short-term standards that are exceeded due to high winds
- (9) Precipitation changes

#### Consideration of Future Meetings

MR. VAN HEUVELEN MOVED, SECONDED BY SENATOR MAHAN, THAT THE TASK FORCE MEET IN WYOMING AND MONTANA IN THE COAL MINING AREAS. MOTION PREVAILED ON A VOICE VOTE.

SENATOR MAHAN MOVED, SECONDED BY MR. VAN HEUVELEN, THAT THE NEXT MEETING OF THE AIR QUALITY TASK FORCE BE HELD IN SHERIDAN, WYOMING, AT A LOCATION TO BE DECIDED UPON LATER. MOTION PREVAILED ON A VOICE VOTE.

MR. VAN HEUVELEN MOVED, SECONDED BY SENATOR MAHAN, THAT THE SECOND MEETING BE HELD THE SECOND WEEK IN AUGUST, PREFERABLY AUGUST 9 OR 10. MOTION PREVAILED ON VOICE VOTE.

SENATOR MAHAN MOVED, SECONDED BY MR. WOOD, THAT THE COMMITTEE HAVE A TOTAL OF THREE MEETINGS, INCLUDING THE ORGANIZATIONAL MEETING. MOTION PREVAILED ON A VOICE VOTE.

MR. ROACH MOVED, SECONDED BY SENATOR FRITZELL, THAT THE FORT UNION AIR QUALITY TASK FORCE GO ON RECORD AS OPPOSING THE MOSS AMENDMENT AND THAT IF THE MOSS AMENDMENT DOES CARRY, THAT THE FOUR STATES PURSUE A COMMON RECOMMENDATION FOR PREVENTING SIGNIFICANT DETERIORATION; AND THAT THIS RECOMMENDATION BE COMMUNICATED TO THE CONGRESSIONAL DELEGATIONS OF THE FOUR STATES. MOTION PREVAILED ON A VOICE VOTE. (NOTE: Mr. Archibald abstained from voting on the motion.)

SENATOR MAHAN MOVED, SECONDED BY MR. VAN HEUVELEN, THAT THE MEETING ADJOURN. MOTION PREVAILED ON VOICE VOTE. Meeting adjourned at 4:00 p.m.

Minutes

of the

FORT UNION REGIONAL TASK FORCE ON  
AIR QUALITY

Meeting of Monday, August 9, 1976  
Guest House Motel  
Sheridan, Wyoming

The meeting of the Task Force on Air Quality was called to order by Chairman Allyn Lockner at 9:00 a.m., August 9, 1976, in the Guest House Motel Conference Room, Sheridan, Wyoming. The following persons "present" were in attendance for the meeting:

Members present:

Montana Representative Howard L. Ellis  
Montana Representative Sam Wolfe  
Mr. Mike Roach, Montana  
Mr. Gene Christianson, North Dakota, substituting for  
Mr. Willis Van Heuvelen  
Dr. J. Ramirez, North Dakota  
Dr. Allyn Lockner, South Dakota  
South Dakota Representative Joe Rickenbach  
Dr. Richard Schluesener, South Dakota  
Mr. U. S. Archibald, Wyoming  
Mr. Randolph Wood, Wyoming

Members absent:

Montana Senator Jack E. Galt  
Montana Senator Dave Manning  
Mr. Ed Danks, North Dakota  
North Dakota Senator Stella Fritzell  
North Dakota Representative Corliss Mushik  
South Dakota Senator Frances S. "Peg" Lamont  
South Dakota Senator Eugene R. Mahan  
Dr. Bill Edwards, Wyoming  
Wyoming Representative John Hursh  
Wyoming Senator Glenn K. Rogers

Others present:

Ms. Sheila Miedema, Project Coordinator, North Dakota  
Mr. Dale Wells, Environmental Protection Agency, Region VIII,  
Denver, Colorado

IT WAS MOVED BY MR. WOOD, SECONDED BY MR. ROACH, AND CARRIED TO APPROVE THE MINUTES OF THE PREVIOUS MEETING AS DISTRIBUTED.

Chairman Lockner asked for any old business. Ms. Sheila Miedema, Project Coordinator, informed the task force that the governors and Congressional Delegations from the four states had been sent a copy of the resolution indicating the Air Quality Task Force of the Fort Union Regional Task Forces was not in favor of the Moss Amendments presently proposed as additions to the Clean Air Act now on the floor of the House and Senate. [See Appendix "A"] Ms. Miedema read responses from the following congressmen indicating their support for the Fort Union Regional Task Force on Air Quality in its effort to defeat the Moss Amendments: Senator George McGovern, South Dakota; Representative James Abdnor, South Dakota; Senator Quentin N. Burdick, North Dakota; Senator Gale McGee, Wyoming. At the time of the task force meeting on August 9, the Senate had approved the Clean Air Act without the Moss Amendments, i.e., the Moss Amendments had been defeated and the House was to vote on the bill the next week. (It has since been passed without the Moss Amendments in the House of Representatives.)

Ms. Miedema presented the resolution by the Common Data Element and Information Exchange Task Force to all Fort Union Regional Task Forces relative to a common data element dictionary. [See Appendix "B"]

IT WAS MOVED BY MR. WOOD AND SECONDED BY DR. RAMIREZ TO COLLECT THE FOLLOWING INFORMATION FROM WHICH TO DRAW AIR QUALITY TERMS AND DEFINITIONS. MR. WOOD WOULD GET A COPY OF DICTIONARIES ON AIR QUALITY PUT OUT BY THE ENVIRONMENTAL PROTECTION AGENCY; MR. ROACH WOULD GET A DICTIONARY PUT OUT BY THE AMERICAN AIR POLLUTION CONTROL ASSOCIATION; EACH STATE WOULD SEND THEIR AIR QUALITY STANDARDS, RULES AND REGULATIONS TO THE PROJECT COORDINATOR; EACH STATE WOULD SEND THEIR ANNUAL DATA INFORMATION REPORT TO THE PROJECT COORDINATOR. THE MOTION CARRIED.

Those people who will send their state's air quality standards, rules and regulations as well as their annual data information report will be as follows: Mr. Wood - Wyoming, Mr. Roach - Montana, Mr. Van Heuvelen - North Dakota, and Dr. Lockner - South Dakota.

After further discussion on common format and language, IT WAS MOVED BY DR. SCHLEUSENER, SECONDED BY MR. ELLIS, AND CARRIED THAT THE TASK FORCE RECOMMEND THAT THE DIRECTOR OF AIR QUALITY DATA IN EACH OF THE FOUR STATES BE REQUESTED TO MEET TO EXPLORE THE FEASIBILITY OF DEVELOPMENT OF COMMONALITY IN AIR QUALITY DATA COLLECTION, ANALYSIS, AND REPORTING. The project coordinator was directed to send a copy of this motion to the legislative service agencies and to direct their respective air pollution people to get together and accomplish this after the final report of this committee is written and after the legislative sessions in the four states are completed.

At this time the task force discussed the nine priority areas it set out at its organizational meeting.

#### PRIORITY NO. 1

Priority No. 1 is interstate cooperation on Class 1, 2, and 3 air standard designations. Montana had been assigned this priority. Their alternate solutions are in Appendix "C". IT WAS MOVED BY MR. CHRISTIANSON, SECONDED BY REPRESENTATIVE ELLIS, AND CARRIED TO ACCEPT THE MONTANA REPORT AND CHOOSE ALTERNATIVE NO. 4 AS THE SOLUTION OF THIS TASK FORCE WITH THE EXCEPTION OF ONE CHANGE IN THE WORDING. RATHER THAN REVIEW AND DESIGNATE ALL BOUNDARY AREAS, IT SHOULD READ "REVIEW AND IDENTIFY ALL BOUNDARY AREAS."

In full, the accepted Montana solution reads as follows:

- "(2) Establish a standardized and organized PSD (prevention of significant deterioration) information flow between states to include broad air quality planning information and specific information such as air quality data, emissions data, and meteorological data. This first step would provide more information for an environmental assessment but does not allow adjoining states much input.
- (3) Establish an ad hoc committee to review interstate potential problems development by development or designation by designation. This alternative provides each state more input into the designation or development review process but does not provide for interstate air quality planning.
- (4) Combine (2) and (3) and set up a standing committee of representatives appointed by the respective governors. The committee would meet on a regular basis to not only exchange specific data and review designations and developments pending but would also review and identify all boundary areas by degree of environmental concern prior to development as part of an advance air quality planning process."

This motion was directed to the governors of each state.

#### PRIORITY NO. 2

Priority No. 2 is information exchange on state laws and regulations and how well they work. IT WAS MOVED BY DR. RAMIREZ, SECONDED BY REPRESENTATIVE WOLFE, AND CARRIED TO AMEND THE RESOLUTION BY OMITTING THE PHRASE "HOW WELL THEY WORK" AND FORWARD THE RESOLUTION TO THE COMMON DATA ELEMENT TASK FORCE FOR THEM TO HANDLE THIS INFORMATION EXCHANGE, I.E., MAKE AVAILABLE TO THE COMMON DATA ELEMENT AND INFORMATION EXCHANGE TASK FORCE, EACH STATE'S LAWS AND REGULATIONS RELATED TO AIR QUALITY.

#### PRIORITY NO. 3

Priority No. 3 is watching federal legislation, especially the Moss Amendments, as they may seriously affect the four-state



region. This priority has already been accomplished as the Moss Amendments were defeated at the federal level. However, the task force project coordinator will be watching for further federal environmental legislation which would affect the four-state region relative to air quality.

#### PRIORITY NO. 4

Priority No. 4 is developing data comparability between the states. Under this priority the task force members discussed various trace elements which the Federal Register does not require states to measure. The states are sampling many other parameters than those mentioned in the Federal Register, and it would be useful for the states to agree to sample, or look into the possibility of sampling, the same parameters in the same unit measure (beyond the Federal Register) so that the data can be compared. The states agreed that it would be interesting to find out which parameters other states were measuring or to determine whether the other states should measure a parameter for the benefit of comparison with the other three states involved, i.e., for reference material. Parameters now being measured in the states above those requested in the Federal Register are as follows: Montana - oxides, carbon monoxide, carbon dioxide, hydrocarbons, sulphates, nitrates, fluorides, lead, sulphation; Wyoming - hydrogen sulphide, fluorides, hydrocarbons, ozones, sulphations; North Dakota - phosphates, sulphation, nitrates, oxidents, fluorides, radioactivity; with the exception of nitrous oxides, South Dakota at the present time is not measuring any parameters over those required by the Federal Register.

IT WAS MOVED BY MR. WOOD, SECONDED BY MR. CHRISTIANSON, AND CARRIED THAT THE VARIOUS AGENCIES IN THE FOUR STATES GET TOGETHER AND DISCUSS THE COMPATIBILITY OF ANY ADDITIONAL, NEW POLLUTANTS MEASURED AND EXCHANGE INFORMATION AND DATA COLLECTED TO DATE ON THE VARIOUS POLLUTANTS NOW MEASURED IN EACH STATE.

#### PRIORITY NO. 5

Priority No. 5 is studying fugitive dust emissions. In discussions by the task force, it was evident that fugitive dust emissions are a very big problem in the four states because of the relatively low levels of precipitation and the many nonpaved roads in the areas where mining is taking place. A MOTION WAS MADE BY MR. ROACH, SECONDED BY MR. ARCHIBALD, AND CARRIED TO CONTINUE EFFORTS TO STUDY THE MAGNITUDE OF DUST EMISSIONS AND THE EFFECTS OF FUGITIVE DUST EMISSIONS FROM ENERGY DEVELOPMENT AND CONVERSION PROCESSES AND TO DEVELOP APPROPRIATE MEASUREMENTS FOR MEASURING THESE DUST EMISSIONS.

The task force recessed for lunch and reconvened at 1:10 p.m.

Chairman Lockner discussed whether another meeting would be necessary or whether or not the task force had any proposed legislation in mind. He referred to the overview document of the Fort Union Regional Task Forces to see if the group was

accomplishing what its original task was and whether or not anything else should be done in a third meeting or in legislation.

IT WAS MOVED BY DR. RAMIREZ, SECONDED BY MR. CHRISTIANSON, AND CARRIED THAT A FINAL DRAFT OF THE COMMITTEE REPORT SHOULD BE WRITTEN BY THE PROJECT COORDINATOR AND SENT TO EACH PERSON WITH TIME FOR COMMENTS AND ALSO FOR A DETERMINATION WHETHER A THIRD MEETING IS NEEDED TO REDRAFT THE REPORT. The time frame would revolve around the project coordinator's schedule. The report should be sent out by approximately September 15, 1976, giving the committee members until October 1, 1976, to complete comments on the redraft and also to allow time to decide whether or not a third meeting would be necessary.

Getting back to discussion on the priorities, IT WAS MOVED BY MR. ARCHIBALD, SECONDED BY MR. WOOD, AND CARRIED THAT THE TASK FORCE RECOMMEND THAT MORE RESEARCH BE DONE ON TRACE ELEMENTS IN COAL AND THAT MONEYS SHOULD BE FOUND FOR SOMEONE TO DO RESEARCH IN THIS AREA.

It was suggested that such organizations as the Old West Regional Commission, United States Energy Research and Development Administration, United States Environmental Protection Agency, and the National Science Foundation and any other appropriate agencies be contacted with regard to this motion on funding research for trace elements.

#### PRIORITY NO. 6

Priority No. 6 involves Indian air standards and was assigned to Montana. [See Appendix "D"] It was indicated that Alternative No. 1 (to ensure representation of Indian tribes on the Fort Union Regional Air Quality Task Force) was done as states did appoint Indian representatives to each of the seven task forces. Discussion that followed expressed the task force's concern that tribal governments always be invited to participate in any Air Quality Task Force meetings.

IT WAS MOVED BY DR. RAMIREZ, SECONDED BY REPRESENTATIVE ELLIS, AND CARRIED TO ACCEPT THE MONTANA REPORT AND FOLLOW THROUGH WITH ALL THREE OF THE POSSIBLE RECOMMENDATIONS WITH THE EXCEPTION THAT ALTERNATIVE NO. 1 SHOULD BE AMENDED AS FOLLOWS: INSTEAD OF "ENSURING" REPRESENTATION IT SHOULD READ "INVITE" REPRESENTATION OF INDIAN TRIBES.

#### PRIORITY NO. 7

Priority No. 7 includes educating the legislature and the public regarding air quality. Much discussion ensued on how to best accomplish this education process. The task force members agreed it would be very useful to put together materials in a readable, concise, brief way using graphics and readable terminology in order for the legislators and public to better make decisions on air quality matters.

IT WAS MOVED BY DR. SCHLUESENER, SECONDED BY DR. RAMIREZ, AND CARRIED TO FIRST RECOMMEND THAT THE CONTINUING ENTITY EVOLVING FROM THE AIR QUALITY TASK FORCE ISSUE PERIODIC REPORTS ON ITS ACTIVITIES, FINDINGS, AND CONCLUSIONS IN A FORM READABLE BY A LAY PERSON. THESE REPORTS ARE TO INCLUDE NOT JUST MINUTES AND DISCUSSIONS BUT ALSO ANALYSIS OF AIR QUALITY PROBLEMS. SECONDLY, TO INVESTIGATE THE POSSIBLE DISSEMINATION PROCESS THROUGH THE RESPECTIVE EXTENSION SERVICES IN EACH STATE, AND THIRDLY TO ENCOURAGE INFORMATION EXCHANGE BECAUSE LEGISLATORS AND THE PUBLIC NEED A SOUND INFORMATIONAL BASIS TO DECIDE HOW MANY PLANTS, OF WHAT NATURE, PRODUCING WHAT AIR EMISSIONS, WITHIN WHAT DISTANCE FROM EACH OTHER, ARE SAFE AND HEALTHY, AND FROM WHAT DISTANCE FARMS AND CITIES ARE AFFECTED.

#### PRIORITY NO. 8

Priority No. 8 deals with exceeding short-term standards which are traceable to energy development due to high winds in the area of the Fort Union Coal Formation states. IT WAS MOVED BY DR. RAMIREZ, SECONDED BY MR. CHRISTIANSON, AND CARRIED THAT THE TASK FORCE RECOMMEND THAT THE FOUR STATES' SHORT-TERM STANDARDS ON AMBIENT AIR QUALITY (FOLLOWING DISCHARGE OF PARTICULATE MATTER AS A RESULT OF ENERGY DEVELOPMENT) BE REWRITTEN TO ALLOW INVOLVED AGENCIES TIME TO REEVALUATE HISTORICAL FREQUENCIES, AND TO CARRY OUT A REVIEW TO SEE IF EXCEEDING STANDARDS WAS AVOIDABLE. This solution came from combining Solutions No. 3 and 4 of the alternative solutions submitted by Wyoming. [See Appendix "E"]

#### PRIORITY NO. 9

Priority No. 9 involves studying precipitation changes due to energy development. IT WAS MOVED BY DR. SCHLUESENER, SECONDED BY DR. RAMIREZ, AND CARRIED THAT THE TASK FORCE RECOMMEND TO THE OLD WEST REGIONAL COMMISSION STATES THAT THE CHIEF EXECUTIVES OF THOSE STATES TAKE RESPONSIBILITY FOR SEEING THAT PREVENTIVE OR CORRECTIVE MEASURES ARE IMPLEMENTED BEFORE SERIOUS DAMAGE FROM PRECIPITATION CHANGES CAN TAKE PLACE. IT IS ADDITIONALLY RECOMMENDED THAT ALL STATES ENCOURAGE AND SUPPORT SCIENTIFIC AND AGRICULTURAL RESEARCH GROUPS WITHIN THEIR BOUNDARIES IN RESEARCHING ANTICIPATED EFFECTS REGARDLESS OF WHETHER THEY ARE POSITIVE OR NEGATIVE. CONTINUED SUPPORT OF PROJECT NOSAMP (NORTHERN STATES AIR MONITORING PROGRAM) CURRENTLY FUNDED BY THE OLD WEST REGIONAL COMMISSION AND ERDA IS ALSO RECOMMENDED. Funding for such research would best come from federal agencies, with united support from the states of this region. This fiscal support from federal agencies should be given to ensure continuity of the program.

After discussing the nine priority areas, the task force members and Chairman Lockner discussed further coordination which could take place. The task force recommendations are reflected in the following actions.

IT WAS MOVED BY MR. CHRISTIANSON, SECONDED BY DR. RAMIREZ, AND CARRIED THAT THE MIDWEST GOVERNORS' CONFERENCE, THE WESTERN GOVERNORS' REGIONAL ENERGY POLICY OFFICE, AND THE ENERGY COMMITTEE OF THE NATIONAL GOVERNORS' CONFERENCE BE ASKED FOR THEIR SUPPORT IN THE RECOMMENDATIONS WHICH HAVE COME OUT OF THE TASK FORCE.

A summary was made of the subjects of the various motions by the task force as follows:

1. Commonality in data, collection, analysis, and reporting.
2. State designations of air quality (critical areas planning).
3. New pollutants (nonfederal) and exchanging information collected to date.
4. Fugitive emissions research.
5. Trace element research.
6. Invite Indian participation.
7. Prepare and disseminate information on air quality in a readable, understandable fashion for legislators and the public.
8. Research on precipitation changes due to energy development.
9. Individual states' short-term standards of ambient air quality.
10. Requests to Common Data Element Task Force to exchange information on the rules and regulations related to air pollution now in existence in the four states.

In an attempt to place its above motions in a more understandable and orderly framework, the various task force members made the following motions which summarize its decisions regarding 1, 2, 3, 4, 5, 7, and 8.

IT WAS MOVED BY MR. ROACH, SECONDED BY MR. WOOD, AND CARRIED THAT A COMMITTEE MADE UP OF THREE PEOPLE FROM EACH STATE INCLUDING ONE TECHNICAL PERSON, ONE LEGISLATIVE PERSON, AND ONE INDIAN REPRESENTATIVE, ALL APPOINTED BY THE GOVERNORS OF THE RESPECTIVE STATES, MAKE UP A CONTINUING ENTITY ON AIR QUALITY.

IT WAS MOVED BY DR. RAMIREZ, SECONDED BY REPRESENTATIVE ELLIS, AND CARRIED TO AMEND THE MOTION TO ADD "WHOSE TASK WOULD BE TO MEET REGULARLY AND DISCUSS ITEMS NO. 1, 2, AND 3 WHICH WERE AS FOLLOWS: NO. 1, COMMONALITY IN DATA, COLLECTION, ANALYSIS, AND REPORTING; NO. 2, STATE DESIGNATIONS OF AIR QUALITY (CRITICAL AREAS PLANNING); AND NO. 3, NEW POLLUTANTS (NONFEDERAL), AND EXCHANGING INFORMATION COLLECTED TO DATE.

IT WAS MOVED BY DR. SCHLUESENER, SECONDED BY DR. RAMIREZ, AND CARRIED TO AMEND THE ABOVE MOTION (MR. ROACH'S MOTION) TO INCLUDE A FOURTH PERSON FROM EACH STATE. THIS FOURTH PERSON IS TO BE A SECOND TECHNICAL PERSON INVOLVED IN THE FIELD OF AIR QUALITY.

IT WAS MOVED BY DR. SCHLUESENER, SECONDED BY DR. RAMIREZ, AND CARRIED TO ADD AN AMENDMENT TO THE ABOVE MOTION (MR. ROACH'S MOTION) INDICATING THAT THE CONTINUING BODY WOULD PREPARE REPORTS PER NO. 7 WHICH READS "TO PREPARE AND DISSEMINATE INFORMATION ON AIR QUALITY IN A READABLE, UNDERSTANDABLE FASHION FOR LEGISLATORS AND THE PUBLIC."

IT WAS MOVED BY DR. SCHLUESENER AND SECONDED BY MR. CHRISTIANSON THAT THE TASK FORCE COMMUNICATE TO GOVERNORS, LEGISLATURES, AND APPROPRIATE FUNDING AGENCIES THAT MORE RESEARCH BE CONDUCTED PER NOS. 4, 5, AND 8. NO. 4 DEALS WITH FUGITIVE EMISSIONS, NO. 5 DEALS WITH TRACE ELEMENTS, AND NO. 8 DEALS WITH PRECIPITATION CHANGES DUE TO ENERGY DEVELOPMENT.

DR. RAMIREZ MOVED, SECONDED BY REPRESENTATIVE WOLFE, AND CARRIED, THAT THE MAIN MOTION BE AMENDED TO IDENTIFY THOSE AGENCIES AS THE ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, THE ENVIRONMENTAL PROTECTION AGENCY, THE NATIONAL SCIENCE FOUNDATION, AND THE OLD WEST REGIONAL COMMISSION. THE MAIN MOTION PASSED.

By letter to Chairman Lockner, Dr. Schluesener clarified the motion to prioritize the request for support for accelerated research as follows: No. 1 priority - potential changes in precipitation due to air pollution from energy development; No. 2 priority - trace element studies; and No. 3 priority - fugitive emissions.

IT WAS MOVED BY MR. ROACH, SECONDED BY DR. SCHLUESENER, AND CARRIED THAT THE THREE AREAS OF FURTHER RESEARCH SHOULD BE COMMUNICATED TO THE NEW CONTINUING ENTITY AND THAT FURTHER COORDINATED RESEARCH BE CONDUCTED.

IT WAS MOVED BY MR. ROACH, SECONDED, AND CARRIED THAT THE TASK FORCE THANK MS. MIEDEMA FOR AN OUTSTANDING JOB OF COORDINATION. MR. CHRISTIANSON MADE THE MOTION TO COMMEND DR. LOCKNER FOR HIS FINE JOB IN CONDUCTING THE TASK FORCE MEETINGS. THE MOTION CARRIED.

The task force was then deemed inoperative unless called into session by the chair. IT WAS MOVED BY MR. WOOD, SECONDED BY REPRESENTATIVE WOLFE, AND CARRIED TO ADJOURN. The meeting adjourned.

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Sheila Miedema  
Project Coordinator



JOHN A. GRAHAM  
DIRECTOR

JOHN D. OLSRUD  
Assistant Director

CHESTER E. NELSON, Jr.  
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# North Dakota Legislative Council

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June 18, 1976

TO: North Dakota, South Dakota, Montana, and Wyoming Congressional Delegations and Governors' Offices

Enclosed is a copy of a resolution passed by the Air Quality Task Force of the Fort Union Regional Task Forces. The group feels very strongly that the Moss amendments would be detrimental to the four-state area.

Sincerely,

Sheila Miedema  
Project Coordinator  
Fort Union Regional Task Forces

SM/mr

Enc.

A RESOLUTION OF THE AIR QUALITY TASK FORCE  
OF THE FORT UNION REGIONAL TASK FORCES

BE IT RESOLVED that the Fort Union Regional Air Quality Task Force\* goes on record as opposing the Moss amendments to the Clean Air Act, and that if passed, the four states would make every effort to proceed with common action to prevent significant deterioration.

\* The Air Quality Task Force is one of seven regional task forces made up of legislators, executive branch officials, academicians, and Indian representatives from the states of Montana, North Dakota, South Dakota, and Wyoming.

## RESOLUTION OF THE

COMMON DATA ELEMENT AND INFORMATION EXCHANGE TASK FORCE  
TO ALL FORT UNION REGIONAL TASK FORCES

WHEREAS, part of the charge of the Common Data Element and Information Exchange Task Force is to encourage development and compilation of a common data element dictionary; and

WHEREAS, task force discussion at its meeting of June 9, 1976, indicated the need for such a definition of terms; and

WHEREAS, the task force must initially define what a common data element dictionary should contain; and

WHEREAS, it was the general consensus of the task force that the dictionary not be a definition of terms, but an explanation of base data that is used in doing impact statements, energy demand studies, population projections, etc.

BE IT RESOLVED, that inasmuch as each task force possesses expertise in its own area, the Common Data Element and Information Exchange Task Force recommends that each task force develop its own definitions for their particular area of study and forward them to the Common Data Element and Information Exchange Task Force as soon as possible after the next meeting of the other task forces.



INTERSTATE COOPERATION ON PREVENTION OF SIGNIFICANT DETERIORATION  
INCLUDING CLASS DESIGNATIONS AND NEW SOURCE REVIEWS1. Nature and Scope of the Problem

Present federal regulation for the Prevention of Significant Deterioration (PSD) requires each state to notify adjoining affected states at least 30 days prior to a required public hearing to redesignate an area from one class to another class. Presently all states are designated Class II. The PSD regulation makes no mention as to affected states participating in new source reviews of other states. However, the regulation requires that emissions must not violate any PSD class increment in another state. Congress has delayed action amendments to the Clean Air Act which could clarify PSD and other related problems. In addition, amendments have been proposed (Moss, etc.) which would delay any protection of clean air areas. The Fort Union Basin is an area of relatively clean air presently faced with the reality of massive coal and natural resource development and conversion. Lands of high environment interest such as national parks, wilderness and other pristine areas are highly vulnerable to nearby development and presently no mechanism exists for affected states to work cooperatively on class redesignation for fragile areas or make input on development, or development planning that will impact the air quality in an adjoining state.

2. Alternative Solutions to the Problem

In order to improve working relations between states on designations and new source reviews and to protect air quality in areas of concern to a particular state, several alternatives are available. These alternatives are listed in order of desirability with the most desirable last.

(1) Follow present federal regulations and allow the Administrator of the Environmental Protection Agency to determine what is adequate. Not a solution but a continuation of present practices.

(2) Establish a standardized and organized PSD information flow between states to include broad air quality planning information and specific information such as air quality data, emissions data, and meteorological data. This first step would provide more information for an environmental assessment but does not allow adjoining states much more input.

(3) Establish an ad hoc committee to review interstate potential problems development by development or designation by designation. This alternative provides each state more input into the designation or development review process but does not provide for interstate air quality planning.

(4) Combine (2) and (3) and set up a standing committee of representatives appointed by the respective governors. The committee would meet on a regular basis to not only exchange specific data and review designations and developments pending but would also review and designate all boundary areas by degree of environmental concern prior to development as part of an advance air quality planning process.

## INDIAN AIR QUALITY PROGRAMS

1. Nature and Scope of Problem

Indian tribes apparently possess independent authority to establish their own pollution standards consistent with Federal Environmental Protection Agency authority. These powers have been recognized for air quality by the Environmental Protection Agency in its regulation regarding "Prevention of Significant Air Quality Degradation." Further, EPA may contract with or make grants to Indian tribes for planning, developing, establish or improving or maintaining programs for the prevention and control of air pollution or implementation of national primary and secondary air quality standards (See Attachment A).

In terms of air quality, it appears under federal interpretation that Indian tribes and reservations are treated similarly to a state. Determinations or decisions made on Indian reservations in the Fort Union Basin will have a significant impact upon development and air quality planning in this area. At the present time there are no cooperative mechanisms to coordinate air quality planning with Indian tribes.

2. Alternative Solutions to the Problem

In order to improve working relations between states and Indian tribes in regard to air quality activities the following alternatives are suggested:

(1) Insure representation of Indian tribes on the Fort Union Regional Air Quality Task Force.

(2) Establish a cooperative arrangement with the tribes and the EPA enabling the states to conduct on behalf of the tribes air quality monitoring, data acquisition and technical assistance.

(3) Provide representation and input by any tribe whose air may be impacted by proposed development on any committee established to prevent significant deterioration and provide advanced planning for air quality.

AIR QUALITY TASK FORCEPRIORITY NO. 8 - STUDY SHORT-TERM STANDARDS WHICH ARE EXCEEDED  
DUE TO HIGH WINDS IN THIS AREANature and Scope of the Problem:

Short-term (24 hr.) ambient standards for particulate matter are exceeded in this area due to arid conditions and high winds. This occurs frequently in areas where the soil is exposed through mining, cultivation, etc., but also occurs in areas where the ground cover is substantial. Such exceedances create a problem in that the Clean Air Act requires abatement plans to be instituted. There is no official recognition that such exceedances of the short-term standard are unavoidable and that control measures are non-existent.

Alternative Solutions:

- (1) Eliminate the short-term standard completely.
- (2) Eliminate the standard as being applicable downwind of mining areas.
- (3) Recognize a historical frequency of such exceedances in the regulation.
- (4) Rewrite the regulation to allow agencies the flexibility to determine if a given exceedance was "avoidable" in deciding whether or not to pursue prosecution of a violation.



Final Report  
of the  
FORT UNION REGIONAL TASK FORCE  
ON  
COMMON DATA ELEMENT AND INFORMATION EXCHANGE

Compiled by Project Coordinator  
and  
Edited by Task Force Members

December 1976



Project Coordinator's  
Summary Report

The Common Data Element and Information Exchange Task Force functioned as the overseeing and coordinating body of the Fort Union Regional Task Forces.

The main responsibility and accomplishment of this task force was to set up an ongoing information exchange system among the four Fort Union states on all energy-related concerns. The legislative service agencies will function as the coordinating and "exchange" entity in each state.

The task force also published a reference booklet encompassing the following four areas of information:

1. List of task force members.
2. Glossary of common data elements and definitions used in the energy field.
3. Major information sources for energy development.
4. Research highlights and analysis by each task force.

## TASK FORCE MEMBERS

### South Dakota

Senator Clint Roberts, Jr.  
Presho, SD 57568

Representative Robert J. Knutson, Jr.  
204 E. Meade  
Rapid City, SD 57701

Mr. Steve Merrick  
State Planning  
State Capitol  
Pierre, SD 57501

Dr. James Villone  
Criminal Justice Studies Program  
University of South Dakota  
Vermillion, SD 57069

Mr. Paul Tessar  
State Planning Bureau  
State Capitol  
Pierre, SD 57501

### Montana

Senator John E. (Jack) Healy  
624 West Granite Street  
Butte, MT 59701

Senator Larry Fasbender  
Route 1, Box 23  
Fort Shaw, MT 59443

Representative Robert Sivertsen  
P.O. Box 531  
Havre, MT 59501

Representative Thomas R. Conroy  
607 West Third Street  
Hardin, MT 59034

Mr. William D. Tomlinson  
Information Specialist  
WMS CPI Library  
University of Montana  
Missoula, MT 59801

### North Dakota

Representative Art Bunker  
721 Southwood Drive  
Fargo, ND 58102

Representative Aloha Eagles  
1745 South Eighth  
Fargo, ND 58102

Mr. Ed Red Owl  
Sisseton Wahpeton  
Route 2, Box 144  
Sisseton, SD 57262

Dr. Jerome Johnson  
Professor  
Agricultural Economics Department  
North Dakota State University  
Fargo, ND 58102

Mr. T. Dwight Connor  
Natural Resources Council  
Governor's Office  
State Capitol  
Bismarck, ND 58505

### Wyoming

Mr. Bill Townsend  
210 Grandview Drive  
Newcastle, WY 82701

Representative Edward McCarthy  
537 East 11th  
Casper, WY 82601

Mr. Don Dobby  
Assistant Director of Computer  
Services  
Casper College  
125 College Drive  
Casper, WY 82601

Dr. James G. Ahl  
Executive Director  
Land Use Administration  
500 Boyd Building  
Cheyenne, WY 82001

Senator Pete Madsen  
1760 Martin Avenue  
Sheridan, WY 82801



## FINAL REPORT

### Introduction

The Fort Union Coal Conference held in Bismarck, North Dakota, in October, 1975, did not have an information exchange task force per se. However, the conference originated the idea of having a task force whose specific goals and objectives would include information exchange and defining common data terms used in the four states and relating to energy. Therefore, a Common Data Element and Information Exchange Task Force was created as one of seven continuing Fort Union Task Forces.

### Assignment

Common Data Element had the assignment of producing a common data element dictionary for use by legislators, academicians, executive branch officials, and the general public in understanding basic energy-related terminology. They also were charged with facilitating information exchange among the four states on behalf of the other Fort Union Regional Task Forces studying specific topics of energy development.

The Common Data Element and Information Exchange Task Force identified the following needs:

1. A report on each state's position on energy development.
2. A dictionary of terms on energy development.
3. Exchange information on legislative action.
4. Sources of information.
5. Secure services of leading existing regional information exchange systems.
6. Federal information service--define alternatives, structures, and models.

The Common Data Element and Information Exchange Task Force delineated for itself the following responsibilities:

1. To compile a list of sources and points of information concerning energy developments, policy, proposed legislation and direction of the four states for distribution to
  - a. Other task forces, and
  - b. Legislatures and other agencies in the four states.

2. Coordinate and compile a common data element dictionary and information exchange from the other task forces.

### Background

Dr. James Villone served as the task force chairman. Senator Clint Roberts served as vice chairman. Ms. Lonnie Langenfeld of the South Dakota Legislative Research Council served as secretary for all meetings. Three meetings were held by the Common Data Element and Information Exchange Task Force. The organizational meeting was held in Pierre, South Dakota, on Wednesday, June 9, 1976. The second meeting was held Monday, July 26, 1976, in Billings, Montana. The final meeting was held in Bismarck, North Dakota, Monday and Tuesday, November 22-23.

### Information Researched

1. Pursuant to resolutions from four other task forces (Social and Economic Impact, Taxation of Energy Resources, Reclamation and Land Use, and Water Allocation and Quality Problems), the Common Data Element and Information Exchange Task Force established a central point in each state for the purpose of exchanging regionwide information on energy development. The legislative service agencies will function as the focal point in each state. (See Appendices "A", page 85; "B", page 86; "C", page 87; "D", page 88, for original resolutions and Appendix "E", page 89, for a description of the information exchange system.)
2. In response to a resolution of the Social and Economic Impact Task Force, the Common Data Element and Information Exchange Task Force coordinated a report on the present positions of each state on energy development utilizing information from the Energy Development, Regulation, and Plant Siting Task Force. The requested information on energy development is in the reference booklet. (See Appendix "F", page 90, for original resolution.)

Each state submitted a list of information sources on energy developments, policy, proposed legislation and direction in the four states. (See Appendices "G", page 91; "H", page 95; "I", page 98; and "J", page 101, for information sources for North Dakota, South Dakota, Montana, and Wyoming respectively.) Additional information sources within the State of Wyoming are in Volumes 1 and 2 of the Wyoming Information Source Catalogue. The project coordinator and some task force members have copies of this catalogue.

To accomplish the second responsibility of coordinating and compiling a common data element dictionary, a resolution was sent to all task forces requesting input on common data elements in their respective areas of concern. (See Appendix "K", page 104, for a copy of this resolution.) A list of the common data elements defined by the Common Data Element and Information Exchange Task Force are listed in Appendix "L", page 105.

To aid in organizing an information exchange system, representatives from Surface Environment and Mining (SEAM), the Old West Regional Commission, the Missouri River Basin Commission and Western Governors' Regional Energy Policy Office were invited to discuss their information exchange systems.

The "Energy Research Information System" (ERIS) published by SEAM and the Old West Regional Commission lists all energy-related projects currently being conducted in the five states of the Old West Regional Commission (Nebraska, as well as the four Fort Union states). Copies are available from the Old West Regional Commission or contact the project coordinator for information. SEAM and Old West also have developed computer search services for projects in progress in the five states.

The Missouri River Basin Commission publishes reports on on-going water projects in each state detailing which agency is conducting the study.

The Western Governors' Regional Energy Policy Office indexed all of its reports and studies. Information on the index can be obtained through the project coordinator.

Other regional and federal agencies queried as to their present information exchange systems included the Federation of Rocky Mountain States, Inc., the United States Geological Survey, the Bureau of Land Management, the Environmental Protection Agency - Region VIII, the Federal Energy Administration - Region VIII, (summaries on these information systems can be found in Appendix "M", page 113).

The Fort Union Regional Task Force on Common Data Element and Information Exchange briefly discussed individual state's energy positions. No formal action was taken since the Energy Development, Regulation, and Plant Siting Task Force was to thoroughly review that subject.

Mr. Doug J. Meyers of the Indian Lignite Manpower Program, United Tribes Educational Technical Center, Bismarck, North Dakota, presented information about his Manpower Program. His information is explained in detail in the Social and Economic Impact Task Force final report.

See Appendices "N", page 119; "O", page 127; and "P", page 131, for copies of minutes for the first, second, and third meetings respectively.

#### Recommendations and Actions

Actions of the Common Data Element and Information Exchange Task Force included establishing an ongoing information exchange system between the four states, compiling the common data element dictionary, and editing final reports of the other six task forces to prepare the reference packet for legislator use.

A MOTION MADE BY THE SOCIAL AND ECONOMIC IMPACT TASK FORCE AND  
DIRECTED TO THE COMMON DATA ELEMENT AND INFORMATION EXCHANGE TASK FORCE

A motion was made, seconded, and carried to encourage, through legislative action or otherwise, the establishment of a central point (letting each state decide which department would function as the central point) for the purpose of exchanging area-wide information on energy development, and that the central information exchange be functioning by summer 1977.

RESOLUTION OF THE  
RECLAMATION AND LAND USE TASK FORCE  
TO THE  
COMMON DATA ELEMENT AND  
INFORMATION EXCHANGE TASK FORCE

WHEREAS, the Common Data Element and Information Exchange Task Force is set up for the purpose of exchanging information, as well as for development of a common data element dictionary; and

WHEREAS, the Reclamation and Land Use Task Force would like information exchanged between the four states of North Dakota, South Dakota, Montana, and Wyoming, with regard to research projects and other pertinent information relating to reclamation;

BE IT RESOLVED, that the Fort Union Regional Task Force on Common Data Element and Information Exchange be asked to coordinate information exchange between all branches of government and interested persons or entities in the private sector; with the exchange relating to research projects and other pertinent data on land use and reclamation in the four-state area.

A RESOLUTION OF THE  
WATER QUALITY AND ALLOCATION TASK FORCE

BE IT RESOLVED, that the Fort Union Regional Task Force on Common Data Element and Information Exchange be asked to set up a continuous and updated information exchange between the four states of North Dakota, South Dakota, Montana, and Wyoming regarding pertinent legislative action during the forthcoming legislative session.

A RESOLUTION OF THE  
TAXATION OF ENERGY RESOURCES TASK FORCE  
TO THE  
COMMON DATA ELEMENT AND INFORMATION EXCHANGE TASK FORCE

WHEREAS , the Taxation of Energy Resources Task Force feels that continual updating with regard to legislative action relating to taxation of coal minerals, and other energy development projects is a relative and timely source of information; and

WHEREAS , the Taxation of Energy Resources Task Force feels this information should be freely and continuously exchanged among the four states in the Fort Union Coal Region; and

WHEREAS , the Common Data Element and Information Exchange Task Force will be setting up an ongoing process of exchanging information relative to legislative sessions and legislative action in the four states;

BE IT RESOLVED , that the Common Data Element and Information Exchange Task Force be asked to exchange information on any changes in laws, additions to laws, agreements, regulations, etc., relating to the taxation of energy resources.



## RESOLUTION

Prepared by  
Chairman Villone

OF THE  
COMMON DATA ELEMENT AND INFORMATION EXCHANGE TASK FORCE  
TO ALL  
FORT UNION LEGISLATIVE COUNCILS AND TASK FORCES

WHEREAS, the charge of the Common Data Element and Information Exchange Task Force is to establish a method for the distribution of energy-related bills and resolutions between the Fort Union states; and

WHEREAS, the early receipt of legislation is necessary for the coordination of regional energy policies; and

WHEREAS, the forum provided by the Fort Union conference provides a mechanism for continuing awareness and cooperation in the field of energy development and regulation;

THEREFORE BE IT RESOLVED that the Legislative Research Council of each Fort Union state should act as the central contact for the distribution of energy-related legislation.

## THEREFORE BE IT FURTHER RESOLVED:

1. That the title and author for all prefiled energy-related bills be exchanged among the Fort Union states prior to the beginning of the legislative sessions.
2. That the title and author of all energy-related bills be exchanged among the Fort Union states each week until the filing deadline.
3. That at the end of the legislative session all energy-related bills and the disposition of such bills be exchanged among the Fort Union states.

A RESOLUTION OF THE  
SOCIAL AND ECONOMIC IMPACT TASK FORCE

BE IT RESOLVED, that the Fort Union Regional Task Force on Common Data Element and Information Exchange be asked to coordinate and produce a handout, pamphlet, or report on the present position of each state with regard to energy development.

Prepared by  
T. Dwight Connor,  
North Dakota task  
force member

SOURCES OF ENERGY RELATED DEVELOPMENT INFORMATION  
IN NORTH DAKOTA:

Governor's Energy Office  
and  
Natural Resources Council

Dr. Charles F. Metzger  
Governor's Office  
State Capitol, Bismarck  
701/224-2200

- Location, production and projection for coal mining megawatts and coal gasification.
- Energy bibliographies.
- Energy Policy.
- Council is composed of all state agencies involved with natural resources.
- Regional Environmental Impact Statement.
- Natural resources policy.
- Central contact point for agencies.

Department of Agriculture

Myron Just  
State Capitol, Bismarck  
701/224-2232

- Range productivity by soil series.

Attorney General's Office  
Environmental Section

Gary Helgeson  
State Capitol, Bismarck  
701/224-2210

- Legal action, interpretation, jurisdiction.

Coal Impact Office

Ralph Dewing  
State Capitol, Bismarck  
701/224-3188

- Allocation of funds to impacted communities.

Geological Survey . . . . . Dr. Ned Noble  
University of North Dakota, Grand Forks  
701/777-2110

- Geologic and topographic maps.
- Location and supply of fossil fuels.
- Hydro-geology of Knife River Basin.

Health Department . . . . . Gene Christianson  
Division of Environmental Engineering State Capitol, Bismarck  
701/224-2374

- Air quality monitoring and enforcement.
- Solid waste.
- Fugitive dust.
- Engineering design.

Health Department . . . . . Norm Peterson  
Division of Water Supply and State Capitol, Bismarck  
Pollution Control 701/224-2386

- Water quality monitoring and enforcement.

Highway Department . . . . . Walter Hjelle  
State Highway Building, Bismarck  
701/224-2581

- Present and projected transportation data.

Land Department . . . . . Richard Lommen  
State Capitol, Bismarck  
701/224-2801

- Coal and mineral leasing state lands.

Legislative Council . . . . . John Graham  
State Capitol, Bismarck  
701/224-2916

- Legislation and research.
- North Dakota Regional . . . Dr. A. William Johnson  
Environmental Assess- 316 N 5th Street - 5th floor  
ment Program Bismarck  
701/224-3700

Public Service Commission . . . Ed Englerth  
Division of Reclamation and State Capitol, Bismarck  
Plant Siting 701/224-2400

- Reclamation law and enforcement.
- Plant Siting law and regulations.
- Utility rates.
- Ten (10) year mining plan.

Soil Conservation Service . . . Gary Puppe  
State Capitol, Bismarck  
701/224-2650

- Soils policy.
- Soils surveys.

State Planning Division . . . Austin Engel  
State Capitol, Bismarck  
701/224-2818

- Land use planning.
- Regional planning councils.
- Socio-economic data.
- Clearing house for impact statements.

Tax Department . . . Byron Dorgan  
State Capitol, Bismarck  
701/224-3452

- Collection and disbursement of severance tax.

Water Commission . . . Vernon Fahy  
State Capitol, Bismarck  
701/224-2750

- Gravel and surface.
- Cooler supply and allocation.

Vocational Education . . . Ted Renner  
State Capitol, Bismarck  
701/224-2259

- Job training.
- Employment security.

Indian Lignite Manpower Program . . . Douglas Myers  
United Tribes, Bismarck  
701/255-3285

STATE PLANNING BUREAU

State Capitol  
Pierre, South Dakota 57501  
605/224-3661Office of  
Executive ManagementPrepared by  
Paul Tessor,  
South Dakota  
task force  
member

June 21, 1976

## MEMORANDUM

TO: Common Data Element and Information Exchange Task Force  
Fort Union Coal Conference

FROM: Paul A. Tessor, Planning Information Assistance Section,  
S.D. State Planning Bureau

RE: Sources of Energy Related Development Information in  
South Dakota

I. Agency: State Planning Bureau  
Section: Planning Information Assistance  
Contact: Paul Tessor 224-3628

## Types of data available:

- Statewide land use/cover data at 1.1 acre resolution (1:24,000) or 10 acre resolution (1:72,000).
- Statewide digital terrain data (1 acre, 1:24,000).
- Soil survey information.
- Various natural resource, agricultural, social, economic, and demographic data by county, planning district, and state.

II. Agency: Department of Environmental Protection  
Section: Air Quality, Water Quality

## Types of data available:

- Air quality data for 22 reporting stations, including particulates, SO<sub>2</sub> and NO<sub>2</sub>.
- Water Quality data for Public Water Supply
- Surface mine data

III. Agency: State Energy Policy Office  
Contact: James VanLoan 224-3603

## Types of Data Available:

- Location, production and capacities of electrical generating facilities.
- Summaries of South Dakota energy consumption.

IV. Agency: Department of Natural Resource Development  
Section: Water Rights

Types of data available:

- Water permits and allocations by type of use and source.
- Surface water inventories.
- Observation well file

V. Agency: South Dakota Geological Survey  
Contact: Duncan McGregor 624-4471

Types of Data Available:

- Geological and topographic maps.
- Ground water data, including well logs and numerous special studies.
- Oil and coal production
- Location of energy producing minerals

VI. Agency: Department of Labor  
Section: Division of Employment Security

Types of Data available:

- Employment by sector and county, monthly since 1960
- Average income by sector and county, monthly since 1960.

VII. Agency: Crop and Livestock Reporting Service  
Contact: John Ranek

Types of Data Available:

- A wealth of crop and livestock data, mostly by county, some dating back to 1890.
- Some historical climatic data.

VIII. Agency: Soil Conservation Service

Types of Data Available:

- Soil Surveys
- Interpretive soils information

IX. Agency: Bureau of Reclamation

Types of Data Available:

- Location and amount of Federal land owned



X. Agency: EROS Data Center  
Section: Applications Assistance Branch  
Contact: Dennis Hood 594-6511

Types of Data Available:

- Landsat Imagery and Computer Compatible Tapes.
- High and Medium Altitude Photography.
- U.S.G.S. Mapping Photography.

APPENDIX "I"

DATA RESOURCES FOR FUELS & ENERGY  
STATE OF MONTANA

Prepared by  
William Tomlinson,  
Montana task force  
member

Department of Community Affairs

Research & Information Systems Division      C. R. Draper, Admin.  
449-2896

Census data, State Clearinghouse for Federal Environmental  
Impact Statements.

Montana State Library      Hald Chambers, Documents Librarian  
449-3004

Documents released by units of state government are to be  
deposited with the State Library.

Department of Fish and Game

Environment and Information Division      James A. Posewitz, Administrator  
449-2603

Agency files and published reports on wildlife populations,  
both game and nongame, fisheries and the impacts of  
ecosystem modification.

Department of Health and Environmental Sciences

Environmental Sciences Division      Benjamin F. Wake, Administrator  
449-3454

Air Quality Bureau      Michael D. Roach, Chief  
449-3454

Ambient and specific point and mobile source emission  
data. Data generally available in agency files.

Water Quality Bureau      Donald G. Willems, Chief  
449-2407

Regional water quality data, in addition to water quality  
data gathered for specific point and non-point sources.  
Data generally available as agency files or water quality  
management plan documents.

Solid Waste Management Bureau      Terrence Carmody, Chief  
449-2821

Data on solid waste disposal problems and programs.  
Data generally available as agency files.

Department of Highways

Engineering Division

Jack R. Beckert, Administrator  
449-3452

Transportation data including traffic rates, rights of way acquisition, and development plans.

Department of State Lands

Leo Berry, Acting Commissioner  
449-2074

Reclamation Division

C. C. McCall, Administrator  
449-2074

Mining and reclamation data. Data generally available as agency files on individual reclamation permit applications.

Legislature

Environmental Quality Council

John W. Reuss, Executive Director  
449-3742

Data on environmental indicators for Montana. Data generally as Annual Reports or agency files.

Legislative Council

Rose E. Weber, Executive Director  
449-3064

Data on legislation and background research on bills.

Lt. Governor's Office

Bill Christiansen, Lt. Governor  
449-3773

Montana Energy Advisory Council

Bill Christiansen, Chairman  
449-3773

Data on energy and fuel demand, production, and flow.

Department of Natural Resources  
and Conservation

Gary Wicks, Director  
449-3712

Energy Planning Division

Albert Tsao, Administrator  
449-3780

10 year plans for utility development and data on specific development proposals for generation, conversion and transmission facilities.

Oil and Gas Conservation Division

Donald Chisholm, Administrator  
449-2611

Exploration, development, and production data.

Water Resources Division

Orrin Ferris, Administrator  
449-2872

Water availability and appropriation data.

Department of Public Service Regulation

449-3017

Data on utility rates and material gathered for rate setting purposes.

Department of Revenue

W. A. Groff, Director  
449-2460

Misc. Tax Division-Severance Taxes

Patricia Mehring  
449-2465

Department of Social & Rehabilitation Services

Pat Melby, Director  
449-3451

Sociological data for impacted communities.

Agricultural Experiment Station

J. A. Asleson, Director  
994-3681

Reclamation research reports.

Montana Bureau of Mines and Geology

S. L. Groff, Director  
792-8321 Ext. 245

Energy Division

R. E. Matson, Chief  
792-8321 Ext. 351

Data on fuel reserves and analysis (e.g. coal, oil).

Bureau of Business and Economic Research

Maxine C. Johnson  
243-5113

Demographic and economic data.

Environmental Library

William Tomlinson, Director  
243-2282

Data available in all areas of resource development, supply, policy, regulation including documentation on associated bio-physical and socio-economic impacts. Data available for checkout on loan basis by telephone or mail.

Prepared by  
Dr. Ahl, Wyoming  
task force member

Information Sources in Wyoming

State Planning Coordinator

Mr. David Freudenthal  
State Planning Coordinator  
Governor's Office  
Capitol Building  
Cheyenne, WY 82001  
Telephone--777-7434  
--Energy Concerns under the  
Executive Office

Department of Agriculture

Mr. Larry Bourret  
Commissioner of Agriculture  
2219 Carey Avenue  
Cheyenne, WY 82001  
Telephone--777-7321

Attorney General's Office

Mr. V. Frank Mendicino  
Attorney General  
Capitol Building  
Cheyenne, WY 82001  
Telephone--777-7841

Geological Survey

Dr. Dan Miller  
State Geologist and Executive  
Director  
Box 3008 University Station  
Laramie, WY 82070  
Telephone--742-2054

Department of Environmental Quality

Robert E. Sundin  
Department Director  
Hathoway Building  
Cheyenne, WY 82001  
Telephone---777-7391  
Air Quality Division  
Randolph Wood  
Air Quality Administrator  
Hathoway Building  
Cheyenne, WY 82001  
Telephone--777-7391

Land Quality Division  
Walter C. Ackerman-Reclamation  
Land Quality Administrator  
Hathoway Building  
Cheyenne, WY 82001  
Telephone--777-7756

Water Quality Division  
Arthur E. Williamson  
Water Quality Administrator  
Hathoway Building  
Cheyenne, WY 82001  
Telephone--777-7781

State Engineer

George Christophulos  
State Engineer  
Barrett Building  
Cheyenne, WY 82001  
Telephone--777-7318  
--Water Allocation  
--Permits

Public Lands Department

Albert Keen, Commissioner  
Capitol Building  
Cheyenne, WY 82001  
Telephone--777-7331

Legislative Service Office

Ralph Thomas, Director  
Capitol Building  
Cheyenne, WY 82001  
Telephone--777-7702  
--Legislation and Research

Public Service Commission

Alex J. Eliopoulos  
Chief Counsel at Administrative  
Secretary  
Supreme Court Building  
Cheyenne, WY 82001  
Telephone--777-7427  
--Utility Rates

Department of Economic Planning  
and Development

John Nialand  
Executive Director  
720 West 18th St.  
Cheyenne, WY 82001  
Telephone--777-7284  
--Various planning functions

Industrial Siting Office

Dr. Blaine Dinger  
Director  
Boyd Building ???  
1720 Carey Ave.  
Cheyenne, WY 82001  
Telephone--777-7368

Land Use Administration

Dr. James Ahl  
Executive Director  
Boyd Building  
1720 Carey Ave.  
Cheyenne, WY 82001  
Telephone--777-7493  
--Land Use Planning

Revenue and Taxation Department

Rudolph Anselmi, Chairman  
Tax Commission  
2200 Carey Ave.  
Cheyenne, WY 82001  
Telephone--777-7582

Governor's Interdepartmental  
Water Conference

George Christophulos  
State Engineer  
Barrett Building  
Cheyenne, WY 82001  
Telephone--777-7318  
--Coordinates all Water Functions

RESOLUTION OF THE  
COMMON DATA ELEMENT AND INFORMATION EXCHANGE TASK FORCE  
TO ALL FORT UNION REGIONAL TASK FORCES

WHEREAS, part of the charge of the Common Data Element and Information Exchange Task Force is to encourage development and compilation of a common data element dictionary; and

WHEREAS, task force discussion at its meeting of June 9, 1976, indicated the need for such a definition of terms; and

WHEREAS, the task force must initially define what a common data element dictionary should contain; and

WHEREAS, it was the general concensus of the task force that the dictionary not be a definition of terms, but an explanation of base data that is used in doing impact statements, energy demand studies, population projections, etc.

BE IT RESOLVED, that inasmuch as each task force possesses expertise in its own area, the Common Data Element and Information Exchange Task Force recommends that each task force develop its own definitions for their particular area of study and forward them to the Common Data Element and Information Exchange Task Force as soon as possible after the next meeting of the other task forces.



ENERGY-RELATED TERMS AND DEFINITIONS

Abatement - The method of reducing the degree to intensity of pollution, also, the use of such a method.

Adjacent lands - All lands within one-half mile of the proposed permit area.

Affected land - Land from which overburden is removed, or upon which overburden, development waste or refuse is deposited and access roads, haul roads, mineral stockpiles, mill tailings, impoundment basins, and all other lands whose natural state has been, or will be, disturbed as a result of the operations.

Air contaminant - Any solid, liquid, gas, or odorous substance for any combination thereof.

Air pollution - The presence in the outdoor atmosphere of one or more air contaminants in such quantities and duration as is or may be injurious to human health, welfare, or property, animal or plant life, or which unreasonably interferes with the enjoyment of life or property.

Air quality standard - An established concentration, exposure time, or frequency of occurrence of a contaminant or multiple contaminants in the ambient air which shall not be exceeded.

Ambient air - The surrounding outside air.

Approved reclamation plan - A detailed plan for rehabilitation of disturbed lands which has been approved by the administrator of the appropriate state agency.

Aquifer - An underground bed or stratum of earth, gravel or porous stone that contains water.

Baseline studies - Documentation on site and prior to mining, the vegetation species and cover, wildlife species and abundance, soil classes and depth, climate, historical and archeological sites or lands of unique value, presence of rare or endangered species, and environmental or other factors required by the administrative agency.

Commence to construct (construction) - Construction includes any clearing of land, excavation, or other action that would affect the environment of the site of any facility, but does not include activities incident to preliminary engineering or environmental studies.

Commence to construct underground (fracturing) - Relates to possible development of a facility, but not including the gathering of geological data by boring of test holes or other underground exploration.

Contamination - Impairment of the quality of state waters by sewage, industrial wastes, or other wastes creating a hazard to human health.

Contouring or original contour - Grading or backfilling the land affected to a terrain consistent with proposed future use or similar in nature to the terrain existing prior to the commencement of the mining operation.

Corridor - The general location of a transmission facility.

Critical habitat - A specific habitat characteristic which, if destroyed, would eliminate specific wildlife indigent and significant to the area. Examples: ponds for waterfowl or live streams for fish.

Date of seeding - The period of the year when seeding should be accomplished for the best chance of obtaining a successful stand. This is dependent upon the seasonal characteristics of precipitation and whether the species seeded and warm season or cool season.

Depth of seeding - The amount of soil coverage over the seed when planted. Optimum coverage is dependent upon seed size and soil texture.

Discharge - The volume of water flowing past a point per unit time.

Disposal system - A system for disposing of sewage, industrial or other wastes, and includes sewerage systems and treatment works.

Downstream states - States in the direction of flow of a stream.

Effluent standard - Any restriction or prohibition on quantities, rates and concentrations of chemical, physical, biological and other constituents which are discharged into the environment.

Emission - A release of air contaminants into the ambient air.

Emissions standard - A limitation on the release of any air contaminant into the ambient air.

Erosion control - Action taken to minimize both wind and water erosion on the areas involved.

Facility - Each plant or unit, or addition thereto, designated for a legal minimum amount of:

- a. Electrical generation; or
- b. Synthetic gas production; or
- c. Liquid hydrocarbon production; or
- d. Coal conversion, refinement, or utilization; or
- e. Electrical transmission; or
- f. Gas, water, or liquid hydrocarbon transmission; or
- g. Geothermal research use; or
- h. Underground coal gasification; or
- i. Uranium mineral enrichment; or
- j. Other energy conversion facility.

Facility, associated - Associated facilities include, but are not limited to, transportation links, aquaducts, diversion dams, storage ponds, reservoirs, transmission substations, and/or any other device or equipment associated with the production or delivery of energy, but not actually part of an energy facility.

Final cut - The last pit created in a surface-mined area.

Fuel burning equipment - Any furnace, boiler apparatus, stack, or appurtenances used in the process of burning fuel or other combustible material for the purpose of producing heat or power or indirect heat transfer.

Fugitive dust - Solid airborne particulate matter emitted from any source other than through a stack.

Garbage - Putrescible animal and vegetable wastes resulting from the handling, preparation, cooking and consumption of food, including wastes from markets, storage facilities, handling and sale of produce and other food products.

Ground water - Natural water occurring below the land surface.

Heat input - The aggregate heat content of all fuels whose products of combustion pass through a stack or stacks. The heat input value is the equipment manufacturers or designers guaranteed maximum input whichever is greater.

Highest previous use - Previous use of the land area which had the greatest economic and social value to the people of the area.

Highwall - Those sides of the pit adjacent to unmined land.

Impacted area - An area in which sudden or prolonged population growth may cause environmental, social, or economic stresses.

Incinerator - Any furnace used in the process of burning solid waste for the purpose of reducing the volume of the waste by removing combustible material.

Indirect air contaminant source - Any facility, building, structure, or installation, or any combination thereof, which can reasonably be expected to cause or induce emissions of air contaminants.

Industrial waste - Any waste substance from the process of business or industry, or from the development of any natural resource together with any sewage that may be present.

Modification - Any physical change in, or change in the method of operation of, an affected facility which increases the amount of any air pollutant (to which any state standard applies) emitted by any such facility or which results in the emission of any such air pollutant not previously emitted.

Monitoring - Periodic evaluation of environmental factors to determine the effect (if any) of the operation or changes occurring because of the operation.

Mulching - The placement of a material on the soil surface or creation of a soil condition which would decrease evaporation of soil moisture. Some mulching operations will also slow the erosive sources of wind and water. Common mulching materials include straw or hay, asphalt emulsion, wood fibers, excelsior mattings, etc.

Multiple chamber incinerator - Any article, machine, equipment, contrivance, structure or part of a structure used to dispose of combustible refuse by burning, consisting of two or more combustion furnaces in series physically separated by walls, interconnected by gas passage ports or ducts in employing adequate parameters necessary for maximum combustion of the material to be burned.

Nonpoint pollution - Pollution whose source is general rather than specific in location.

Noxious weed - Any weed species designed as noxious by the appropriate state agency - usually perennial and difficult to control.

Orphan mine - A mined-out area which had been abandoned prior to the enactment of land reclamation statutes where the owner or operator has no legal responsibility for reclamation.

Overburden - All of the earth and other materials which lie above (or between) mineral deposits in the original state or as it exists after removal from its natural state in the process of surface mining.

Particulate matter - Any material, except water in uncombined form, that is or has been airborne, and exists as a liquid or a solid at standard conditions.

Permit - A written warrant or license granted by one having authority.

Pit - A depression in the land surface created by the removal of overburden and mineral in the process of surface mining.

Point source - Any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, or vessel or other floating craft, from which pollutants are or may be discharged.

Pollutant - Dredged spoil, solid waste, incinerator residue, sewage, sewage sludge, garbage, trash, chemical waste, biological material, radioactive material, heat, wrecked or discharged equipment, rock, sand, or any industrial, municipal or agricultural waste discharged.

Process weight - The total weight of all materials introduced into any specific emitting process which may cause emissions. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous and combustion air will not.

Proposed use of reclaimed lands - The planned use of the reclaimed lands after reclamation has been completed.

Public water supply - Any water supply being distributed by service connections utilized to furnish water for human consumption either in preparing foods or beverages for inhabitants of residences or business establishments.

Rate of seeding - Pounds of seed per acre. Rate is determined by seed size and precipitation to which the area is subject. General recommendations are from 14 to 40 pure live seed per square foot. This may be too much in arid areas.

Reclaimed lands - Affected land which has been backfilled, graded, shaped, and revegetated or otherwise conditioned to make them suitable for any uses or purposes consistent with those enumerated in the reclamation plan.

Reclamation - The process of reconditioning or rehabilitating affected land to the useful purpose consistent with the approved reclamation plan.

Reduction - Any heated process, including rendering, cooking, drying, dehydrating, digesting, evaporating, and protein concentrating.

Refuse - Waste materials directly connected with the mining or milling activity. This may include overburden, reject minerals, mill tailing, fly ash, etc.

Reservoir - A pond, lake, tank, or basin, natural or manmade, used for the storage, regulation and control of water.

Riparian right - A right of those living or located on bank on a natural water course to access or use the shore, bed, and water.

Roughing land surface - Mechanical disturbance designed to leave the land surface in a rough condition to protect from excessive erosion and accumulate moisture. Common types of roughing include pitting, gouging, contour furrowing, etc.

Route - The specific location of a transmission facility within a designated corridor.

Rubbish - Nonputrescible solid waste consisting of both combustible and noncombustible wastes. Combustible rubbish includes paper, rags, cartons, wood, furniture, rubber, plastics, yard trimmings, leaves, and similar materials. Noncombustible rubbish includes grass, crockery, cans, dust, metal furniture, and like materials which will not burn in an incinerator capable of reaching temperatures of 1600° F to 1800° F.

Scrubber - An air pollution control device that uses a liquid spray to remove pollutants from a gas stream by absorption or chemical reaction. Scrubbers also reduce the temperature of the emission.

Seeding techniques - Methods of seed application and coverage such as drilling, broadcasting and harrowing, hydro-seeding, etc.

Self-regenerating vegetation - Vegetation which is capable of reproducing itself over a long period of years and without artificially modifying the environment by such means as irrigation or fertilization.

Sewerage system - A device for collecting or conducting sewage, industrial wastes, or other wastes to an ultimate disposal point.

Site - The location of an energy conversion facility.

Slurry - A mixture of a liquid and solid. Slurries of water and coal are used in coal processing and transportation.

Small wastewater facility - Sewage system, disposal system, and treatment works for a single-family house, or a single mobile home unit.

Soil amendments - Materials added to the soil to change soil structure, texture, permeability, fertility or neutralize salts, acids or other toxic substances.

Soil survey - Identification and mapping of all soil material within the permit area as well as identification and location of those soil materials which can be used as suitable plant growth material.

Species selection - The determination of plant species and varieties to be introduced in the reclamation process. They must be adapted to the climate, soil, and proposed use of the site involved and should be self-regenerating.

Spoil - That part of the overburden lying between the subsoil and the mineral seam, or seams, and rejected minerals. This material is usually not suitable for supporting plant growth.

Spoil pile - A pile of spoil material prior to being graded, shaped, used as backfill material or topsoiled in preparation for reseeding.

Stack - A smoke stack; a vertical pipe or flue designed to exhaust gases and suspended particulate matter.

Stockpile stabilization - Techniques applied to stockpiles of either spoil or topsoil to minimize both wind and water erosion. Roughing the surface and planting of temporary or annual plant species, planning directional location of stockpiles, and piling with gentle slopes are common procedures recommended for stockpile stabilization.

Stream load - The quantity of solid and dissolved material carried by a stream.

Strip mining or surface mining - Mining of a mineral by removing the overburden above the mineral and removing directly the deposits thus exposed.

Suitable plant growth material - That portion of the soil material (usually the A, and in some cases, the B horizon) found to be acceptable by the soil survey for resspreading over the surface of the regraded areas to provide a medium for acceptable plant growth.

Sulfur dioxide SO<sub>2</sub> - A heavy, pungent, colorless gas formed primarily by the combustion of fossil fuels. SO<sub>2</sub> damages the respiratory tract as well as vegetation and materials and it is considered a major air pollutant.

Surface water - Water on the earth's surface exposed to the atmosphere as rivers, lakes, streams, and oceans.

Topsoil - See suitable plant growth material on page 7.

Topsoiling - Spreading of suitable plant growth material over the prepared spoil in preparation for revegetation of the area.

Toxic material - Material containing elements or compounds which, if within the root zone, would prohibit or inhibit normal plant growth or be absorbed by the plants in such quantity that the plant growth would be toxic to the grazing animal. Commonly excessive quantities of salts, acid generating pyrites, selenium, molybdenum, aluminum, or radioactive elements should not be within the root zone of the vegetation to be grown on the area.

Treatment works - Works installed for treating or holding sewage, industrial wastes, or other wastes.

Utility - Any person engaged in and controlling the generation, manufacture, refinement, or transmission of electric energy, gas, or liquid hydrocarbon products, including but not limited to, electric power generation or transmission, coal gasification or liquefaction, petroleum refinement, uranium enrichment, and the transmission of coal, gas, liquid hydrocarbon products, or water from or to any energy conversion facility.

Vegetation type - The kind of vegetation growing on the area. Usually designated or named according to the dominant (and sometimes the subdominant) species in cover or aspect.

Wastewater facility - Sewage system, disposal system, and treatment works.

Waters of the state - Any body of water, irrigation system, or drainage system either surface or underground.

Water pollution - The presence in water of one or more water contaminants in such quantities and duration as is or may be injurious to human health, welfare, or property, animal or plant life, or which unreasonably interferes with the enjoyment of life or property.

Water quality standard - A plan for water quality management, criteria to protect those uses, implementation and enforcement plans, and an anti-degradation statement to protect existing high quality waters.

Wildlife - All nondomesticated animals in the area. This includes not only the commonly accepted game animals, but small mammals, birds and aquatics such as fish.



## INFORMATION EXCHANGE SYSTEMS

### I. FEDERATION OF ROCKY MOUNTAIN STATES, INC.

The federation is composed of representatives of private business, state government, and education from the five states of Colorado, Montana, New Mexico, Utah, and Wyoming. Together they develop regional policy positions for the approval of the states' governors, who direct the federation. Councils and committees of the federation also recommend and simulate multi-state programs and projects to improve business, government, and education in the Rocky Mountain region.

The Federation of Rocky Mountain States is governed by a board of directors headed by the governors of the states in the region. Each state's delegation on the board, and all federation councils and committees, is balanced among business, government, and educator members. The federation maintains a permanent office and a small staff in Denver, Colorado. Councils, each composed of committees, propose regional positions and suggest regional programs for the approval of the governors.

Councils are currently concerned with market development, telecommunications, natural resources, human resources, transportation, housing and community development, and the arts and humanities. Of these councils the Fort Union Regional Task Forces would be most interested in the Natural Resources Council.

The federation does not generally conduct research nor operate programs. Rather, it identifies critical issues and priorities, and it marshals human, institutional, and financial resources to address those issues. Foremost in the issue identification process are the councils, each composed of members representing private business, state government, and education/research institutions.

Under the Natural Resources Council there is a council steering committee, an energy resources committee, a land use committee, an ad hoc earth resources technology applications committee, an ad hoc committee on federal lands, an ad hoc water resources committee, an environmental committee, and an ad hoc forest practices committee.

Information exchange is conducted through meetings periodically held by the federation councils and through personal requests made among members and to the staff which, when answered, are disseminated. Also, information regarding the states' needs and wants is forwarded for action to the appropriate people on the national level.

A main source of information and continual update is the Federation of Rocky Mountain States, Inc., newspaper or newsletter

entitled "Federation Forum." This is a monthly newsletter which discusses energy development in the federation states. One very important section of this newsletter is entitled "Publications Available" and lists all new publications available from the federation. This is a continually updated publication list of tremendous help to those seeking information from the Federation of Rocky Mountain States, Inc. The Federation Forum can be ordered from the Federation of Rocky Mountain States, Inc., at no charge. Many of the publications available on the publication list are free of charge for the first copy and will be sent to anyone requesting them.

The publications program of the Federation of Rocky Mountain States, Inc., is under the general direction of the director of public information. The publications program was established in late 1975 to make more accessible and visible the wealth of information on the programs, projects, and activities of the federation to all interested--both its membership and the general public. Distribution of all new federation publications and response to all requests for past publications are centralized in the Publications Office.

The Publications Office serves as a library and reproduction control center for all publications produced under the Federation of Rocky Mountain States auspices. The Publications Office also serves a quality control function--in part by providing federation staff and consultants with guidelines on the preparation of manuscripts in an effort to promote uniformity in style and format. The Publications Office prepares monthly and quarterly reports indicating who is being served and which publications are most requested. As a rule, one copy of each new publication is mailed to each person or organization on the general distribution list. In addition, a specialized distribution list, which matches the subject matter of the publications with appropriate national and regional audiences, is developed for each publication. Finally, all publications are available to members (gratis for the first copy) and to the general public according to an established price schedule.

The Federation Annotated Bibliography contains abstracts of each federation produced publication. The bibliography is arranged by federation publication categories to enable the reader to quickly grasp what is available in each category. The Federation Annotated Bibliography is intended primarily for external distribution.

The management of the Publications Office requires systematic and continuing staff cooperation at all times to ensure effective operation of the publications program.

More detailed information regarding the Federation of Rocky Mountain States, Inc., its makeup, membership, offices, etc., is available through me, if anyone is interested in further understanding its operation.

## II. UNITED STATES GEOLOGICAL SURVEY UNDER THE UNITED STATES DEPARTMENT OF THE INTERIOR

A local representative of the United States Geological Survey (USGS) suggested I contact the Office of Water Data Coordination, Water Resources Division, Reston, Virginia. Therefore, my information from the USGS is heavily water data oriented. However, I suspect that the same type of information and information exchange is available on any topic or area of concern that is addressed by the United States Geological Survey.

The United States Department of the Interior, Geological Survey, has a wealth of information on water data. The main concern of individuals or organizations needing this type of data would be in contacting the right person with the right information. I suspect this is a difficult task for those unfamiliar with the USGS or with other agencies workings on the federal level. Information is gathered, catalogued, and disseminated to those interested parties asking for the information--such as myself and the Fort Union Regional Task Forces.

Specific information that was sent to me by the United States Department of the Interior covered the water resources Region X, or the Missouri Basin. Geological Survey works closely with many agencies, both federal and nonfederal, in developing the water data program in the Missouri River Basin. The day-to-day operations are carried out through the regional and district offices of the water resources division. Because of the intense activity in the energy resources areas, special effort has been made in the regional office to coordinate the programming activity. Some of these federal and nonfederal agencies with whom the USGS coordinates are: Missouri River Basin Commission, Department of Agriculture, Department of the Army, Department of Housing and Urban Development, Department of Transportation, Energy Research and Development Administration, Environmental Protection Agency, and National Oceanic and Atmospheric Administration.

Data is gathered by these federal agencies on many geological-related topics. For instance, water-related activities would range from basic appraisal of the resource, regulation and surveillance of water supply, and flood- and pollution-control purposes, with parallel research on the technology of water data applications. The Geological Survey has a continuing concern for environmental and ecological effects of activities that affect or are affected by water and emphasizes data on surface water, ground water, water quality, and water use for historical reference as well as on real-time basis for management purposes. Data for individual sites often serves multiple purposes in providing to various agencies a basis for decision or action in carrying out their designated missions.

The United States Geological Survey gathers a wealth of information on many topics. Examples that would be very important to the four states in the Fort Union regional area would be

information on water demands due to expanded irrigation; water problems associated with environmental protection, population growth, development of coal resources, and development of coal gasification and thermoelectric plants; demands for agriculture and hydroelectric uses; creation of a water data base; land resource management programs; etc. The list of data that the USGS has available to it and information it gathers for dissemination at request could be expanded even further.

Information sent to me by the USGS included a catalogue of information on water data which lists all water data information available in the Missouri River Basin. Catalogues such as this one will be available upon request through the U.S. Department of the Interior, Geological Survey, Office of Water Data Coordination. Also sent to me was a regional plan for federal water data acquisition, fiscal year 1977, for the Missouri Basin region and the federal plan for the acquisition of water data in fiscal year 1976. This is the type of information that is available through the Geological Survey and the Water Data Coordination Office. The Office of Water Data Coordination is charged with the following responsibilities:

1. Exercise leadership in achieving effective coordination of water data acquisition activities.
2. Undertake continuing and systematic review of water data requirements and activities.
3. Prepare and keep current a federal plan for efficient utilization of water data acquisition activities.
4. Maintain a central catalogue of information on water data and on federal activities being planned or conducted to acquire water data.
5. Design and operate a national network system for acquiring data on the quality and quantity of surface and ground water, including the sediment load of streams.
6. Organize the national network data and the catalogue of information so as to facilitate maximum use.

I have a pamphlet which describes in more detail the responsibilities of the Office of Water Data Coordination of the Geological Survey under the U.S. Department of the Interior.

Also sent to me were hydrologic unit maps of Montana, North Dakota, and Wyoming. (The South Dakota map has not yet been received from the printer. It is expected in the near future.)

### III. THE BUREAU OF LAND MANAGEMENT (BLM)

The BLM is a participant, with the Old West Regional Commission and the United States Forest Service (Surface Environment and Mining Program), in the quarterly report on ongoing research and activities in the area. The report is entitled "Energy Research Information System (ERIS)."

A list of literature holdings is now being computerized. The system is up and operating but far from complete at this time. The computer listing is by subject category and is available upon request from Mr. Larry Pointer of the Bureau of Land Management. Mr. Pointer is the coordinator of information systems for the BLM. Mr. Pointer reports that approximately one-half of all literature holdings are now on-line on the computer.

### IV. ENVIRONMENTAL PROTECTION AGENCY (EPA), REGION VIII

The EPA reports no formal information exchange system at the present time. There is a normal day-to-day operation procedure which provides information on request to anyone.

At the present time the Office of Energy Activities in the EPA has been charged with the responsibility of developing a formal information system. The Office of Energy Activities will be working with such organizations as North Dakota REAP to gather information for a formal information system.

At the present time the Energy Activities Office is identifying users and user needs in a few categories, namely under energy. The office has contracted with states to identify decision makers and to identify decision maker needs. The state agencies involved with energy dealings are identified and the "person in charge" of the organization is identified. Also, Indian reservations, planning organizations, and industry are being looked at as possible users of an EPA formal information exchange system. At this stage in the process, EPA is only trying to identify people, organizations, etc., who need information. The task is expected to be accomplished at this time next year.

At present, they are not looking for sources identifying where information is located, but rather trying to identify possible users of information presently available through their organization.

The only formal reporting now done by the EPA is in the form of information that goes out to states and information that states have to return to EPA. An example of this type of information is a monthly report which must be submitted by the State Health Department.

Each separate department within the EPA contacts its counterpart in each state relative to questions, problems, etc., associated with that department. This is the only type of formal reporting that is now conducted by the Environmental Protection Agency.

V. FEDERAL ENERGY ADMINISTRATION (FEA), REGION VIII

The FEA says their main source of information output is the publication entitled "Energy Information in the Federal Government: Federal Energy Information Locator System." This is a very lengthy publication (and expensive) which lists all energy-related projects in the entire United States.

The FEA, Region VIII, has no authority to gather information. Their only task is to distribute information available to those interested, i.e., people who call or write with specific requests. FEA, Region VIII, does have "specialties" in certain fields such as water, social and economic impact, and coal development. A great deal of information can be obtained from the FEA Region VIII office on their specialty topics. All that is necessary is that a request be made.

The FEA, Region VIII, staff also said that its information source is the Bureau of Mines publication entitled "Mineral Industries Series." I am trying to locate a copy of the publications suggested by FEA staff.

Minutes  
of the

Prepared by Lonnie  
Langenfeld, South Dakota  
Legislative Research Council

FORT UNION REGIONAL TASK FORCE ON  
COMMON DATA ELEMENT AND INFORMATION EXCHANGE TASK FORCE

Meeting of Wednesday, June 9, 1976  
Room A-15, State Capitol Building  
Pierre, South Dakota

The organizational meeting of the Task Force on Common Data Element and Information Exchange was called to order by Moderator James Villone at 9:40 a.m., June 9, 1976, in Room A-15, State Capitol Building, Pierre, South Dakota. The following persons "present" were in attendance for all or a portion of the meeting:

Members present:

Montana Senator Larry Fasbender  
Montana Representative Robert Sivertsen  
Mr. William Tomlinson, Montana  
North Dakota Representative Aloha Eagles  
Dr. Jerome Johnson, North Dakota  
Mr. T. Dwight Connor, North Dakota  
South Dakota Senator Clint Roberts, Jr.  
South Dakota Representative Robert Knutson, Jr.  
Dr. James Villone, South Dakota  
Mr. Paul Tessar, South Dakota  
Mr. Steve Merrick, South Dakota  
Wyoming Representative Edward McCarthy  
Mr. Don Dobby, Wyoming  
Dr. James Ahl, Wyoming

Members absent:

Montana Senator Jack Healy  
Montana Representative Thomas Conroy  
North Dakota Representative A. G. Bunker  
Mr. Ed Red Owl, North Dakota

Others present:

Ms. Sheila Miedema, Project Coordinator, Bismarck, North Dakota  
Mr. Wesley Tschetter, South Dakota Legislative Research Council  
Director, Pierre, South Dakota  
Mr. Bill Johnson, Investor Owned Electric Companies, Pierre,  
South Dakota  
Ms. Lonnie Langenfeld, South Dakota Legislative Research  
Council, Pierre, South Dakota

Following introduction of the task force members and staff, the moderator called for nominations for chairperson.

REPRESENTATIVE KNUTSON MOVED, SECONDED BY SENATOR FASBENDER, THAT DR. VILLONE BE THE CHAIRMAN OF THE TASK FORCE.

SUBSTITUTE MOTION BY MR. CONNOR, SECONDED BY REPRESENTATIVE KNUTSON THAT NOMINATIONS CEASE AND THAT DR. VILLONE BE ELECTED BY ACCLAMATION. MOTION PREVAILED ON A VOICE VOTE.

SENATOR FASBENDER MOVED, SECONDED BY REPRESENTATIVE KNUTSON, THAT SENATOR ROBERTS BE THE VICE CHAIRMAN OF THE TASK FORCE.

SUBSTITUTE MOTION BY REPRESENTATIVE SIVERTSEN, SECONDED BY REPRESENTATIVE KNUTSON, THAT NOMINATIONS CEASE AND THAT SENATOR ROBERTS BE ELECTED VICE CHAIRMAN BY ACCLAMATION. MOTION PREVAILED ON A VOICE VOTE.

In regard to the position of secretary for the task force, MR. CONNOR MOVED, SECONDED BY REPRESENTATIVE KNUTSON, THAT MS. LONNIE LANGENFELD ACT AS THE SECRETARY FOR ALL THE MEETINGS OF THE TASK FORCE AND THAT A RESOLUTION BE FORWARDED TO MR. WESLEY TSCHETTER, SOUTH DAKOTA LEGISLATIVE RESEARCH COUNCIL DIRECTOR. MOTION PREVAILED ON A VOICE VOTE.

#### Adoption of Procedural Rules by the Membership

Proxy Voting--REPRESENTATIVE KNUTSON MOVED, SECONDED BY REPRESENTATIVE MCCARTHY, THAT PROXY VOTING BE ALLOWED DURING THE TASK FORCE MEETINGS. MOTION PREVAILED ON A VOICE VOTE.

Quorum--SENATOR FASBENDER MOVED, SECONDED BY SENATOR ROBERTS, THAT A QUORUM BE CONSTITUTED OF TWO (2) MEMBERS FROM EACH STATE.

Discussion followed on the motion. SUBSTITUTE MOTION BY REPRESENTATIVE EAGLES, SECONDED BY MR. MERRICK, THAT THE MOTION BE AMENDED TO PROVIDE THAT A QUORUM BE CONSTITUTED BY EIGHT (8) MEMBERS, WITH REPRESENTATION FROM EACH STATE. MOTION TO AMEND PREVAILED ON A VOICE VOTE.

THE ORIGINAL MOTION AS AMENDED PREVAILED ON A VOICE VOTE.

Chairman Villone stated that in regard to general rules of order, he preferred to conduct the meetings quite informally unless it would be necessary to call on Roberts' Rules of Order.

Ms. Miedema then spoke to administrative details. She informed the group that there will be two additional delegates appointed from Wyoming. She gave background information on the beginning of the task forces. The task forces came out of the Fort Union Coal Conference last fall, at which many recommendations were made. She noted that this particular task force has no backup from the conference.



Ms. Miedema explained that lead states were chosen for each task force in order to enable the selection of the original moderator and because much of the assistance comes from the legislative agency in the lead state. She further explained that her office was located in the North Dakota Legislative Council because North Dakota applied for the grant and will administer all funds.

Ms. Miedema then addressed the scope of the task force study and the activities which could be undertaken. There are many areas in which the task force may elect to work.

#### Listing of Possible Topics of Discussion and Concern

The Chair solicited general input from task force members. He referred the members to the resolutions from the other task forces requesting the committee to do certain things (on file).

Senator Fasbender asked if energy policy statements would be forthcoming from the other states. He noted that Montana is in the process of developing an energy policy statement; this should be completed by the end of this year and will be subject to legislative approval in January 1977. Representative McCarthy reported that Wyoming does not have its energy policy formulated. A formal policy will not be forthcoming until 1977. Mr. Connor reported that North Dakota is in about the same situation; he agreed that even if policy statements were available, it would be difficult to mold them into one policy statement. Mr. Merrick stated that South Dakota has not formulated any coordinated policy statement.

In regard to the resolution from the Social and Economic Task Force calling for the establishment of a central point in each state for the purpose of exchanging information on energy development, the Chair called for comments. Representative McCarthy stated that he felt it would be of value and interest to the legislative branches. He suggested that this resolution be adopted.

There was consensus that the idea of trying to coordinate and produce a report on present energy positions in each state should be acted on at some time.

Representative Knutson felt that a dictionary of terms relating to coal development would go along with such a report. Mr. Tomlinson felt that this dictionary would involve developing a technology or procedure whereby the information could be disseminated instead of just a definition of terms per se. He noted that the problems lie with: (1) internal data and information exchange; and (2) need for external information exchange. This would include an exchange between governmental parties as well as private parties. He was of the opinion that the dictionary was not a high priority issue at this time. Mr. Tessar suggested the possibility of forwarding a resolution to the other task forces requesting that they define the terms in their particular areas rather than having this task force do the actual defining of the terms.

Discussion followed. Chairman Villone explained that there is a problem with a difference in definitions among the states. It was suggested that such a dictionary include terms relative to energy development as a whole rather than limited to coal development. Representative Eagles expressed a concern over duplication of effort. The possibility of inviting other groups to meet with the task force was introduced. Ms. Miedema reported that coordinating activities had already been started, but the task force may invite people to speak at its meetings.

Mr. Tomlinson suggested that it would be very helpful to determine what information exchange procedures are already in existence within the states and how these can be formalized and effectively utilized. He did not feel this would be a difficult task to accomplish. This would involve information systems within the four states and information systems with and between regional organizations and groups. Representative McCarthy felt there were two areas to be addressed: (1) sharing legislative action, and (2) information that is available within the states. Chairman Villone referred to the resolution from the Water Quality and Allocation Task Force requesting an information exchange regarding legislative action during the forthcoming session. This would be a separate area from information exchange between the regional organizations within the four-state area.

The following areas of concern were identified in discussion:

1. Report on each state's position in regard to energy development;
2. Compile a dictionary of terms relating to energy development;
3. Information system on exchange of legislative action;
4. Identification of sources of information;
5. The question of getting on top of existing regional exchange systems; and
6. Federal information service--define **alternative** structures and models.

Chairman Villone then referred to the resolution from the Social and Economic Impact Task Force regarding a centralized point for the purpose of exchanging areawide information on energy development. Senator Roberts asked how many states had an energy office within their administrative structure. It was noted that South Dakota, Montana, and North Dakota have such an office; Wyoming has a combination of four agencies which deal in this area, and Representative McCarthy explained how the functions are distributed among the various departments. Senator Roberts was of the opinion that perhaps the energy office in the state could be used to coordinate this information. Mr. Tomlinson pointed out that in

most states these offices are not designed to carry on such activities as public dissemination. Representative Eagles reported that North Dakota has a Regional Environmental Assessment Program (REAP). Ms. Miedema reported that REAP has gathered much baseline data and all of its present contracts for data gathering will be completed by January 1, 1977. She suggested that the central point for information dissemination in the states be one person. Representative Knutson suggested that the task force designate one person from each state to be contacted for information and answers to questions regarding energy information and policy. Mr. Merrick pointed out that there are two areas involved--the legislative aspect and what is being done by the various departments in regard to energy policy.

Lengthy discussion followed on the goals of the task force and what group or groups it is intended to serve. Ms. Miedema stated that she did not foresee the task force as being only for the legislative branch. Representative Eagles felt that the executive branch had its own information system and that the purpose of the task force was to help the legislative branch. Representative Sivertsen was of the opinion that this information should be available to all groups within the four-state area; a coordinated effort would enable everybody to benefit. Chairman Villone felt that a decision would have to be made within the group on this issue. He stressed the importance of such a question. Mr. Merrick stated that the other task forces were addressing specific areas; he suggested that perhaps this task force could be charged with developing the data generated by the other task forces and disseminating it. It was his opinion that the charge of this task force was to assemble and disseminate the information that is generated by the other task forces. Mr. Dobby suggested that the task force direct resolutions to the other task forces requesting information that can later be assembled and distributed.

Chairman Villone suggested that perhaps the task force should be dealing with a larger information base than just the information that is generated by the other task forces. Upon questioning by Mr. Connor, Ms. Miedema responded that the other six task forces are getting together and exchanging information. There is, however, no ongoing broad dissemination of information. Upon questioning by Chairman Villone, Ms. Miedema stated that final reports will be written and will be mailed out on a mass scale. Chairman Villone felt that what is to be considered is an ongoing exchange system which reaches beyond the task forces. Mr. Dobby felt that at this time it would be too large a task to go beyond the task forces in exchanging and disseminating information. Mr. Merrick suggested identifying areas of information within the various states and designating contact people. He suggested (1) an exchange of minutes between the task forces; and (2) that each state name a central person or identify the state agencies within their state to be contacted regarding information on energy development.

REPRESENTATIVE MCCARTHY MOVED, SECONDED BY REPRESENTATIVE KNUTSON, THAT THE FOLLOWING BE THE GOALS OF THE TASK FORCE: (1) TO COMPILE A LIST OF SOURCES AND POINTS OF INFORMATION CONCERNING ENERGY DEVELOPMENTS, POLICY, PROPOSED LEGISLATION, AND DIRECTION OF THE FOUR STATES FOR DISTRIBUTION TO OTHER TASK FORCES AND LEGISLATURES AND OTHER AGENCIES OF THE FOUR STATES; AND (2) TO COORDINATE AND COMPLETE A COMMON DATA ELEMENT DICTIONARY AND INFORMATION EXCHANGE FROM OTHER TASK FORCES. MOTION PREVAILED ON A VOICE VOTE.

#### Priority Areas of Concern

Lengthy discussion was held on goals and how the task force should proceed. The following items were decided upon for task force study and consideration:

1. Report on each state's position in regard to energy policies. Individual state delegations should report back at the next meeting with a preliminary report on what their state has done in the area of energy development, legislation, and goals.
2. Dictionary of terms--a resolution from the task force to the other task forces asking that they begin work on defining or setting up the dictionary of terms relevant to development in their individual areas and forward such to the task force. The Chair named a subcommittee composed of Tessar (South Dakota), Fasbender (Montana), Eagles (North Dakota), and McCarthy (Wyoming), to formulate a resolution.
3. Question of legislative action--request one legislator from each state to consider over the interim and report back at the next meeting the most effective way to set up a mechanism for gathering, coordinating, and distributing legislative action among all of the states. State representatives appointed were: Roberts (South Dakota), Sivertsen (Montana), Eagles (North Dakota), and McCarthy (Wyoming).
4. Individual state sources of information--to be addressed by the task force in the afternoon session.
5. Identifying sources of regional information--it was decided to invite regional group representatives to meet with the task force. The following organizations were selected to be contacted in regard to meeting with the task force: Old West Regional Commission, Western Governors' Regional Energy Policy Office, Missouri River Basin Commission, and Surface Environment and Mining. It was agreed to contact the following agencies by letter regarding obtaining written information for the task force's perusal: Bureau of Land Management, Forest Service,

Geological Survey, Environmental Protection Agency, and the Energy Resource Development Agency.

Meeting recessed at noon and reconvened at 1:30 p.m.

The task force turned to the resolution on compiling a dictionary of terms. Senator Fasbender read the report of the subcommittee. It was decided that the information from the other task forces should be submitted following their second meetings.

REPRESENTATIVE SIVERTSEN MOVED, SECONDED BY SENATOR ROBERTS, THAT THE RESOLUTION AS FORMULATED BY THE SUBCOMMITTEE BE ADOPTED TO READ AS FOLLOWS:

WHEREAS, PART OF THE CHARGE OF THE COMMON DATA ELEMENT AND INFORMATION EXCHANGE TASK FORCE IS TO ENCOURAGE DEVELOPMENT AND COMPILATION OF A COMMON DATA ELEMENT DICTIONARY; AND

WHEREAS, TASK FORCE DISCUSSION AT ITS MEETING OF JUNE 9, 1976, INDICATED THE NEED FOR SUCH A DEFINITION OF TERMS; AND

WHEREAS, THE TASK FORCE MUST INITIALLY DEFINE WHAT A COMMON DATA ELEMENT DICTIONARY SHOULD CONTAIN; AND

WHEREAS, IT WAS THE GENERAL CONSENSUS OF THE TASK FORCE THAT THE DICTIONARY NOT BE A DEFINITION OF TERMS, BUT AN EXPLANATION OF BASE DATA THAT IS USED IN DOING IMPACT STATEMENTS, ENERGY DEMAND STUDIES, POPULATION PROJECTIONS, ETC.

BE IT RESOLVED, THAT INASMUCH AS EACH TASK FORCE POSSESSES EXPERTISE IN ITS OWN AREA, THE COMMON DATA ELEMENT AND INFORMATION EXCHANGE TASK FORCE RECOMMENDS THAT EACH TASK FORCE DEVELOP ITS OWN DEFINITIONS FOR THEIR PARTICULAR AREA OF STUDY AND FORWARD THEM TO THE COMMON DATA ELEMENT AND INFORMATION EXCHANGE TASK FORCE AS SOON AS POSSIBLE AFTER THE NEXT MEETING OF THE OTHER TASK FORCES.

MOTION PREVAILED ON A VOICE VOTE.

#### Direction of the Task Force

Discussion was held on the scope and direction of the task force's study and the number of meetings that would be necessary. It was agreed that the next meeting of the task force would be held July 26 in Billings, Montana. The time and place will be determined at a later date by the Montana delegation and the coordinator.

The agenda for the next meeting will include the states' reports on energy positions; the question of exchange and coordination of legislative action; reports from the four agencies invited and consideration of written material that is requested from the federal agencies; consideration of the individual state information sources; and information on centralized information and retrieval.

Discussion was held on identifying sources of information within the four states. It was decided that each state would be assigned the task of formulating a summary of sources of information, such to be communicated to the other task forces. Those selected to provide this information were: Tessar (South Dakota), Tomlinson (Montana), Connor (North Dakota), and Ahl (Wyoming). The material should be transmitted to Ms. Miedema no later than June 25.

A brief discussion was held on whether or not to include private sources in the listing of informational sources. It was decided that the people chosen from each state should determine which of these private sector organizations should be included.

Mr. Tomlinson then gave a brief overview of the Environmental Library in Montana. He reported on its functions, methods and sources. The services are available by contacting the library. The material is sent throughout the region and throughout the nation, although it basically serves Montana. Mr. Tomlinson submitted a written report on his presentation to Ms. Miedema (on file).

Legislation was briefly discussed. Chairman Villone was of the opinion that perhaps at a later time recommendations would be made by the task force. Representative McCarthy felt this area should be left up to the other task forces that have expertise in given fields. Representative Sivertsen asked if there would be an opportunity for all seven task forces to meet at the end of their studies. Ms. Miedema explained that such a meeting was not funded under the proposed plan, but this is an area that can be explored.

There being no further business, REPRESENTATIVE MCCARTHY MOVED, SECONDED BY SENATOR ROBERTS, THAT THE MEETING ADJOURN. MOTION PREVAILED ON A VOICE VOTE. Meeting adjourned at 3:05 p.m.

FORT UNION COMMON DATA ELEMENT  
AND INFORMATION EXCHANGE TASK FORCE

APPENDIX "O"  
Prepared by  
Jim Waggener, South  
Dakota Legislative  
Research Council

MINUTES

The Fort Union Common Data Element and Information Exchange Task Force meeting was called to order by Chairman Villone at 9:00 a.m. on July 26, 1976. The roll was called. Those members present were:

SOUTH DAKOTA

Chairman James Villone  
Mr. Paul Tessar  
Senator Clint Roberts, Jr.  
Mr. Steve Merrick

MONTANA

Senator Larry Fasbender  
Representative Robert Sivertson  
Representative Thomas R. Conroy  
Mr. William D. Tomlinson

NORTH DAKOTA

Representative Aloha Eagles  
Dr. Jerome Johnson  
Mr. T. Dwight Connor

WYOMING

Dr. James G. Ahl  
Mr. Bill Townsend  
Senator Pete Madsen

Coordinator Sheila Miedema was also present. Mr. Jim Waggoner, Intern for the South Dakota Legislative Research Council acted as secretary.

Chairman Villone asked for any objections to the minutes of the last meeting. There being none, Representative Conroy moved they be accepted, seconded by Representative Eagles. The motion carried on a voice vote.

In response to the request at the last meeting to see some information exchange systems, Ms. Miedema gave a short presentation. Ms. Miedema was most impressed with the Federation of Rocky Mountain States.

Next on the agenda was a series of short presentations by regional organizations relative to their information exchange systems. First was Ms. Beth Givens from the Old West Regional Commission. She explained that the representative from SEAM was unable to attend, but that SEAM was gathering material on a computer at Fort Collins. She explained that the Old West Regional Commission was formed in 1972 and is a cooperation among five states. The areas it is involved with are: agriculture, transportation, industrial development, and energy development. Some of the information the Old West disperses includes: 1) a bi-annual reference book which lists and describes various projects. This

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publication is distributed at no charge. 2) provide a computer search service to determine what projects are in progress anywhere in the five states on any of the subjects with which the Commission deals.

Don Ohnstad of the Missouri River Basin Commission gave a short presentation concerning some of their services. Some of their activities include: 1) a publication each year which tells of water projects in each state and what agency is conducting them, 2) calling special coordination meetings on water planning, 3) rating and prioritizing projects in area and has an ongoing system of state and federal program review, 4) working on federal and Indian land water rights. Mr. Ohnstad noted that the Commission has put out some reports and that these are available upon request from the publications office. Upon questioning by Mr. Townsend of Wyoming concerning scarce resource management. Mr. Ohnstad said that this is a new committee studying the use of land and ground water and that information concerning their study could be obtained by writing to Mr. Nick Barbarosa, Director of Planning, Suite 403, 10050 Regency Circle, Omaha, Nebraska 68114.

Representative Eagles of North Dakota voiced some concern about when the data base was collected and the use of such data by the Commission, but Mr. Ohnstad assured her that the data were the most recent available. Mr. Ohnstad, in response to a question by Representative Conroy of Montana, stated that the Commission has recommended some legislation in the past. He did not elaborate.

Mr. Leonard Bronder from the Western Governor's Regional Energy Policy Office gave a short presentation. He stated that his office gathers information and writes short reports which are sent to the Governors' staffs. The staffs request information and a newsletter is also sent. He stated that they are funded by the Four Corners and the Old West Commission. He recommended that states fund their own energy information services in order to save time and money. Senator Madsen of Wyoming expressed concern over duplication between this office and the Old West Regional Commission, but was assured that each has a separate identity and that this office is mainly concerned with looking at energy questions at a regional level.

Next on the agenda was a discussion of information exchange between the four states and the ways to go about this exchange. There was general consensus that the Legislative Councils of the states should gather all the relevant information, but a question arose as to how to best disseminate this information to the other four states. Representative McCarthy of Wyoming felt that the Legislative Council should compile all the laws introduced and send them to the other states at the end of their legislative session. He felt this would save money for the states and time for the Legislative Council staff. After a short discussion, it was decided that those bills pre-filed would be distributed to the other states at the start of the legislative session. Then, until the filing deadline, send the bills to the other states at the end of each



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week. Finally, at the end of the session, there would be a complete exchange of bills.

Representative Eagles of North Dakota moved, seconded by Senator Roberts of South Dakota, that this procedure be adopted. Motion prevailed on a voice vote.

Chairman Villone reported that the resolution adopted by this committee at their last meeting and distributed to the other committee was causing some confusion. Senator Fasbender and Representative Sivertson of Montana pointed out that the resolution was requested by the other committees. It was decided to defer action on this until all of the other committees had a chance to look at this resolution.

The resolution from the Tax Committee was brought up. Ms. Miedema stated that this had already been covered by the committee's action on the data exchange.

Chairman Villone recessed the committee at 11:50 for lunch.

The meeting was reconvened at 1:05 by Chairman Villone. He asked the committee to decide what goals they wanted to reach and when and how many more meetings they wished to hold. Senator Fasbender of Montana noted that the committee has done what it was sent to do. This was the consensus of the committee. Chairman Villone suggested that he keep in touch with a representative member of each state and then decide if another meeting is needed. This was so moved by Senator Fasbender of Montana, seconded by Senator Roberts of South Dakota. Motion prevailed on a voice vote. Chairman Villone appointed Representative Conroy of Montana, Representative McCarthy of Wyoming and Representative Eagles of North Dakota as the members with whom he will keep in touch.

Ms. Miedema presented information gathered from the four states relative to information sources now available in each state. Representative Eagles felt that this information should be sent to each of the other states.

Next on the agenda was a discussion relating to present energy policy and goals of the states. Chairman Villone inquired of the committee if they wished to publish a brochure of the various states' energy policies. He was informed by Mr. Merrick of South Dakota that his state has no formal energy policy developed. Mr. Ahl of Wyoming noted that really no state can have a comprehensive energy policy.

Mr. Theodore H. Clack, Jr. of the Montana Energy Advisory Council staff said that Montana has no real energy policy, but because a bill was passed in last legislative session asking the Governor to do so, an energy policy is being drafted.

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Chairman Villone noted the wide difference of opinion on this matter, and Mr. Tessar felt the states should use Montana's position as a guideline. Representative Eagles said that the other committees should put out a brochure after their work is complete and then this committee should meet and edit the reports and answer some specific questions. No action was taken on this proposal.

Chairman Villone stated that he would keep in touch with the people he appointed and the rest of the committee would be notified of their decisions. With that, it was moved by Dr. Jerome Johnson, seconded by Mr. Tessar to adjourn. Motion prevailed on a voice vote.

Prepared by  
Project Coordinator

Minutes

of the

FORT UNION REGIONAL TASK FORCE ON COMMON  
DATA ELEMENT AND INFORMATION EXCHANGE

Meeting of Monday and Tuesday, November 22-23, 1976  
Gold Room, State Capitol  
Bismarck, North Dakota

The Fort Union Regional Task Force on Common Data Element and Information Exchange was called to order by Chairman Villone at 10:40 a.m. on Monday, November 22, 1976.

Members present:           South Dakota Senator Clint Roberts  
                              Mr. Mark Steichan substituting for  
                              Mr. Steve Merrick, South Dakota  
                              Dr. James Villone, South Dakota  
                              Mr. Paul Tessar, South Dakota  
                              Montana Senator Larry Fasbender  
                              Montana Representative Robert Sivertsen  
                              North Dakota Representative Art Bunker  
                              Dr. Jerome Johnson, North Dakota  
                              Mr. T. Dwight Connor, North Dakota  
                              Wyoming Representative Edward McCarthy  
                              Mr. Don Dobby, Wyoming  
                              Dr. James Ahl, Wyoming  
                              Wyoming Senator Pete Madsen  
                              Mr. Bill Townsend, Wyoming

Members absent:           South Dakota Representative Robert Knutson  
                              Montana Senator John E. (Jack) Healy  
                              Montana Representative Thomas Conroy  
                              Mr. William E. Tomlinson, Wyoming  
                              North Dakota Representative Aloha Eagles  
                              Mr. Ed Red Owl, North Dakota

Others present:           Ms. Sheila Miedema, Project Coordinator,  
                              North Dakota  
                              Mr. Rikki Thompson, Mr. Robert Martinson;  
                              Brock Lee Films, Inc., North Dakota  
                              Montana Senator Gordon McOmber, Chairman,  
                              Water Allocation and Quality Problems  
                              Task Force  
                              Mr. Larry Finnerty, South Dakota, representing  
                              the Social and Economic Impact Task Force  
                              Mr. Neal Jacquot and Mr. Robin Carpenter,  
                              Sixth Planning District, South Dakota  
                              Mr. Gene Christianson, North Dakota,  
                              representing the Air Quality Task Force

A correction was made to the minutes of the previous meeting to add Representative McCarthy and Mr. Dobby to the attendance list.

Under discussion at the meeting were the final reports of the seven task forces. The project coordinator explained that the Common Data Element and Information Exchange Task Force was to review and make ready for publication pertinent information for legislator use during the 1977 sessions. The project coordinator suggested that the following four items be included for each task force:

1. Common data terms
2. Membership list
3. Highlights of research
4. Sources of information

In reviewing the final reports Dr. Johnson noted that appendices should be dated and credited to whomever prepared them. The project coordinator made note of this and will correct this in all appendices.

Mr. Connor suggested that North Dakota Regional Environmental Assessment Program be added under the Legislative Council as a source of energy-related information in North Dakota. Mr. Connor of North Dakota, Senator Fasbender of Montana, Mr. Tessar of South Dakota and Dr. Ahl of Wyoming updated their respective sources of energy-related information for the final report.

The task force broke down into two subcommittees to begin the discussion of the respective task force final report. Dr. Johnson, Senator Roberts, Representative Sivertsen, and Representative Bunker discussed the Social and Economic Impact Task Force. Senator Fasbender, Mr. Steichan, Mr. Tessar, and Mr. Connor discussed the Water Allocation and Quality Problems Task Force.

The meeting recessed for lunch and reconvened at 1:00 p.m.

Again, the task force broke into smaller committees to review the final reports of the six Fort Union Regional Task Forces. Dr. Ahl, Senator Roberts, Representative Bunker, and Mr. Townsend served on the Water Allocation and Quality Problems Subcommittee with the assistance of Task Force Chairman Senator McOmber. Senator Fasbender, Mr. Steichan, and Mr. Connor served on the Taxation of Energy Resources Subcommittee. Dr. Johnson, Mr. Tessar, and Mr. Dobby served on the Energy Development, Regulation and Plant Siting Subcommittee. Representative McCarthy, Representative Sivertsen, and Senator Madsen served on the Air Quality Subcommittee assisted by Mr. Christianson representing Mr. Willis Van Heuvelen, member of the Air Quality Task Force.

A second round of meetings was also held in the afternoon. The subcommittee studying Social and Economic Impact were Dr. Ahl, Senator Roberts, Representative Bunker, Mr. Townsend, and Mr. Connor. Reviewing the Reclamation and Land Use Task Force final report were Senator Fasbender, Mr. Steichan, Representative McCarthy, Representative Sivertsen, and Senator Madsen.

It was agreed that the task force members would dismiss for the evening at the completion of their subcommittee meeting and be ready to report to the entire committee the following morning.

Chairman Villone reconvened the meeting of the Common Data Element and Information Exchange Task Force at 9:20 a.m., Tuesday, November 23, 1976. Chairman Villone called for the final reports on the respective task forces.

Dr. Ahl reported to the chairman and the project coordinator on the findings of the Social and Economic Impact Subcommittee. The subcommittee summarized, as research highlights, parts of the Introduction and Project Coordinator Summary Report contained in the final report. The subcommittee also listed various social and economic terms to be defined by the project coordinator for inclusion in the glossary section of the reference booklet.

Chairman Villone called on Senator Fasbender for the report of the Taxation of Energy Resources Subcommittee. The subcommittee wants the reference booklet to include a section from the Recommendations of the final report, written by the project coordinator, and Appendix "A". The categories of license tax, corporation tax, income tax, property tax, franchise tax, and indemnity fund taxes are to be added to the chart in Appendix "A". Also to be added to the chart are distribution charts of different rates of severance tax varying with the Btu content of the coal.

Discussion resulted relating to the Btu-related tax on coal in Montana. Representative Bunker felt that figures may indicate an unfair comparison because most of the coal in Montana is over 7,000 Btu's and therefore taxed at a higher rate than the coal under 7,000 Btu's; whereas, in North Dakota most all coal is under 7,000 Btu's and therefore any comparison or conclusion may be misleading. To help alleviate this problem the distribution chart for comparison purposes was added to Appendix "A". The Taxation Subcommittee also included from the final report a summary of annual taxes on surface and underground mining from the Western Governors' Regional Energy Policy Report "Taxation of Coal Mining" January, 1975.

Chairman Villone called for the report of the Subcommittee on Energy Development, Regulation, and Plant Siting. Dr. Johnson served as chairman for this subcommittee. The subcommittee requested that the summary table comparing the power facility siting laws of Montana, Wyoming, and North Dakota be included in the reference booklet. The subcommittee also edited from the final report the energy development policies of the four states for inclusion in the reference booklet. The subcommittee defined common terms used in the facility siting laws of the three states to be included in the glossary section of the reference booklet.

Chairman Villone called on Dr. Ahl for a report on the Subcommittee on Water Allocation and Quality Problems. The subcommittee revised the Project Coordinator's Summary Report and pulled definitions from the state's laws to be included in the reference booklet. The project coordinator is to define, with the assistance of the North Dakota State Engineer, certain water quality and water allocation terms.

Dr. Villone called on Senator Fasbender to report on the Reclamation and Land Use Subcommittee's workings. The glossary for this task force has already been completed and will be included in the reference booklet as is. The task force edited the Recommendations and Actions subsection of the final report to be included into the reference booklet. Also to be included is the comparison chart in Appendix "E". Bonding requirements in the four states are to be added to this comparison chart.

Chairman Villone called upon Representative McCarthy to present the subcommittee report on air quality. The subcommittee defined approximately 20 terms relating to air quality for inclusion in the glossary of the reference booklet. For the research highlights the subcommittee listed areas of research and study described and discussed in the Summary Report and Recommendation section of the task force's final report.

The task force, by general consensus, agreed that the project coordinator had the right and responsibility to edit and arrange their subcommittee final reports in order for them to be parallel and effective in the reference booklet.

The Common Data Element and Information Exchange Task Force then reviewed their own final report and discussed what items should be included on their behalf in the reference booklet.

The task force members updated their state's energy information sources to be included in the reference booklet. The project coordinator will also include lists of federal and regional agencies used as resources.

The project coordinator was asked to send a list of all printed resources, publications, etc., to the legislative service agencies in the other states so they would know what information existed and was available at the North Dakota Legislative Council through the coordinator.

The task force agreed to include a summary of the resolution on the information exchange system set up by the Common Data Element and Information Exchange Task Force in the final report. The task force suggested that a discussion on this information exchange system be toward the front of the booklet to be more visible to the legislative reader.

A paragraph was to be added on base data needed for impact statements. The paragraph to be included is as follows: "Data required for evaluation of potential energy conversion plant site and transmission corridors.

#### I. Current status data

- a. Atmospheric data - temperature, precipitation, air quality, wind, and cloud data
- b. Lithographic data - soils and geologic data
- c. Hydrologic data - surface water and subsurface water data
- d. Biologic data - animal and plant siting data
- e. Sociologic and geographic data - population, employment, land use, transportation network, and aesthetic value data

## II. Data on planned energy conversion plant or transmission system

- a. System type and design
- b. Location data
- c. Size data - capacity or corridor width
- d. Input resources - location, quality and quantity
- e. Transportation requirements
- f. Work force data - construction and operation phases
- g. Emission data
- h. System hazards

## III. Impact data

- a. Probable data on natural systems - construction, emissions, effluents and hazards
- b. Probable social-economic impact and displacements - employment population, economy, social service

Mr. Connor discussed the fact that the Old West Regional Commission Energy Task Force was interested in setting up a project such as the Fort Union Regional Task Forces focusing on legislative exchange among the Old West states. They have at this time shelved their project in order to see how the Fort Union task forces succeed in their information exchange process.

The task force then discussed continuation of the Common Data Element and Information Exchange Task Force. The task force made the recommendation to request from the funding agency minimal moneys for one representative from each legislative research agency to review the information exchange system after the legislative session and to act as the coordinating body for information exchange from then on. The task force felt that the information exchange was the most important factor of the seven task forces and since it was started it should be kept going. IT WAS MOVED BY REPRESENTATIVE MCCARTHY, SECONDED BY SENATOR MADSEN, AND CARRIED THAT THE TASK FORCE REQUEST A PERSON FROM EACH LEGISLATIVE SERVICE AGENCY TO CONTINUE THE INFORMATION EXCHANGE ON LEGISLATIVE ACTIONS. The project coordinator will seek funding for the legislative service agency representative.

A RESOLUTION WAS MADE BY DR. AHL AND SECONDED BY DR. JOHNSON TO READ AS FOLLOWS: THE TASK FORCES MEMBERSHIP COMPOSED OF THOSE PEOPLE FROM MONTANA, WYOMING, NORTH DAKOTA, AND SOUTH DAKOTA DO HEREBY RESOLVE THAT THE TASK FORCE COORDINATOR, SHEILA MIEDEMA, BE COMMENDED FOR HER DEDICATION, EXPERTISE, AND LEADERSHIP IN THIS JOINT VENTURE OF THE AFOREMENTIONED STATES. RESOLUTION WAS PASSED BY A UNANIMOUS VOTE.

Chairman Villone was commended for his expertise and leadership throughout the past meetings and was thanked for his efforts on behalf of the Common Data Element and Information Exchange Task Force.

Discussion ensuing indicated that the task force members felt that the personal contacts, friendships, and communications among the four states had been of great value to them not only in the coal-related areas but in many legislative actions, administrative actions, etc., among the four sister states.

IT WAS MOVED BY DR. JOHNSON, SECONDED BY MR. TOWNSEND, AND CARRIED  
TO ADJOURN. The meeting adjourned.

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Sheila Miedema  
Project Coordinator



Final Report  
of the  
FORT UNION REGIONAL TASK FORCE  
ON  
ENERGY DEVELOPMENT, REGULATION, AND  
PLANT SITING

Compiled by Project Coordinator  
and  
Edited by Task Force Members

December 1976



## Project Coordinator's

### Summary Report

The Energy Development, Regulation, and Plant Siting Task Force extensively reviewed the plant siting laws of North Dakota, Montana, and Wyoming, indicating sections of the laws that were working well and noting other sections which may have to be revised in the upcoming legislative sessions. Industry representatives were very helpful in explaining difficulties encountered while working within the present plant siting laws.

The energy policies of the respective states were discussed. At the present time, Montana has a controlled development intended to ensure future generations a high quality of life after the coal is gone. North Dakota has an energy policy of cautious development, i.e., development with controls. South Dakota has no coal development at the present time. Wyoming is a development-oriented state, with state government carefully monitoring all phases of development.

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Senator Philip Testerman  
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Representative Harold Millett  
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## FINAL REPORT

### Introduction

At the Fort Union Coal Conference held in Bismarck, North Dakota, October 13-15, 1975, Mr. Gary Wicks, Montana Department of Natural Resources and Conservation; Mr. Richard Elkin, North Dakota Public Service Commission; Mr. Delwyn Dearborn, Dean of the College of Agriculture and Biological Sciences, South Dakota State University; and Representative Dean Prosser, Wyoming, Chairman, House Mines and Minerals and Industrial Development Committee; made presentations on energy development and regulation within their state borders. Copies of their presentations have been reprinted in the Fort Union Coal Conference proceedings. Copies are available from the project coordinator or the respective legislative service agencies.

### Assignment

The Coal Conference delegates discussed in general energy development and regulation within their states. They also touched on concerns which were being covered by other panels at the Coal Conference such as air quality, water availability, land reclamation, and social and economic impact. Their main discussion centered around industrial siting of energy facilities, which was not covered by any other panel at the conference. In the continuing Fort Union Regional Task Forces, the concern of plant siting was added to the original responsibility of discussing and exchanging information and maintaining a continual interchange on energy development within the Fort Union region. The energy development and regulation panel also suggested that a common data element dictionary be formulated. This assignment was transferred to a new task force, Common Data Element and Information Exchange. The major assignment of the Energy Development, Regulation, and Plant Siting Task Force was to review the energy policies and positions in the member states as well as comparing the respective plant siting laws now in force and evaluating the success of these laws.

### Background

Representative Dean Prosser, Wyoming, served as task force chairman. Ms. Kim Allen, Wyoming Legislative Service Agency, served as permanent secretary for the task force. Three meetings were held by the Energy Development, Regulation, and Plant Siting Task Force. The first organizational meeting was held in Casper, Wyoming, on Wednesday, May 26, 1976. The second meeting was held in Billings, Montana, Monday and Tuesday, August 2-3, 1976; the third meeting was held in Rapid City, South Dakota, on Monday, October 4, 1976.

## Information Researched

The Energy Development, Regulation, and Plant Siting Task Force researched in detail the Plant Siting Acts of Montana, North Dakota, and Wyoming. (South Dakota is now drafting a plant siting law.) General summaries of the Plant Siting Acts for the respective states are as follows:

### North Dakota

The "North Dakota Energy Conversion and Transmission Facility Act," more commonly the "Plant Siting Act," went into effect on April 9, 1975.

For the purpose of actual siting, the real effective date of the Siting Act was December 23, 1975. On this date the North Dakota Public Service Commission's rules governing energy conversion and transmission facility siting went into effect. For a complete understanding of the siting requirements and procedures which have been established, the Siting Act and the siting rules must be read together.

The best way to explain the Siting Act and the siting rules is by means of chronological illustration of the different things that a utility is either required to do or allowed to do:

1. Initially, every utility which either has a facility or plans within the next 10 years to own or operate a facility must file a 10-year plan with the commission. This plan must be filed and updated annually.
2. Then, every utility which plans within the ensuing five years to construct or own a facility must file a facility development plan annually with the commission.
3. At least one year prior to the beginning of construction of a facility, a utility must file a letter of intent with the commission. The purpose of this letter is to enable the commission to determine if it has jurisdiction over the facility, to plan for the processing of the application, and to administer and enforce any other activities or duties required of the commission. In North Dakota approximately eight such letters have been filed.
4. A utility may file a letter of intent asking only that the commission determine whether it has jurisdiction over a proposed facility. If a utility does this the commission must hold a public hearing on that question.
5. If the commission has jurisdiction over a proposed facility, before construction may begin, the utility

must submit an application for and be issued a certificate of site compatibility. No such applications have as yet been filed with the commission.

6. The Siting Act and rules also provide that a utility may request the commission to determine that a demonstrable emergency exists and allow it to file an application for an emergency certificate or permit, or both.
7. If the proposed facility is a transmission facility, after obtaining a certificate, the utility has two years to apply for a permit authorizing the construction of the facility within the corridor designated in the certificate. The utility may not begin construction until the permit has been issued by the commission.
8. If the proposed facility is a plant, as far as the commission's authority is concerned, the utility may begin construction as soon as the certificate is issued.

The first point to be made in the actual siting of a facility by the utility, and this is a very important point, is that the commission is not going to do the actual siting of a plant or line. A utility must propose sites or corridors in its application for a certificate and if the criteria are met and the Siting Act and rules are otherwise complied with, the commission will approve the siting by issuing a certificate, and in the case of a transmission facility, the commission will issue a permit after the application is approved.

If a utility has not complied with the criteria, the commission will not issue a certificate or permit and the utility must then propose another site. The criteria to be followed in siting an energy conversion facility are twofold. First, there is the criteria to be followed in siting of a plant, Second, there is the criteria for a transmission facility. Each part has the following three subparts:

1. Exclusion areas.
2. Avoidance areas.
3. Selection criteria.

The commission will publish prior to July 1, 1976, an inventory of exclusion and avoidance areas which it has been able to locate and which are mappable. This inventory, however, will be final only in the sense that it will be the inventory as adopted and published by the commission. At any time prior to the issuance of a certificate in the case of a plant site and prior to the issuance of a permit, in the case of a transmission facility, if the commission is made aware that the proposed facility will

be on or across an area which otherwise meets the criteria as an exclusion or avoidance area, the certificate or permit will not be issued. There is one qualification--a plant or a transmission facility may be located on or across an avoidance area if the utility can show there are no reasonable and acceptable alternatives, or if locating the proposed facility in such an area will have a lesser human and environmental impact and will be compatible with the greatest public benefit and the least private injury.

Further details can be obtained by getting, from the North Dakota Legislative Council, a copy of the law or a copy of the rules and regulations of the North Dakota Public Service Commission governing the siting of energy conversion and transmission facilities.

### Wyoming

The Wyoming Industrial Development Information and Siting Act requires that a permit be obtained to construct an industrial facility. As set forth by the Act, an industrial facility is any energy generating and conversion plant:

- a. Designed for, or capable of, generating 100 MW of electricity or more, or any addition increasing the initial capacity of a facility by that amount.
- b. Designed for, or capable of, producing 100 million cubic feet of synthetic gas per day or more, or any addition increasing existing capacity by that quantity.
- c. Designed for, or capable of, producing 50,000 barrels of liquid hydrocarbon products per day or more, or any addition increasing existing capacity in like amount.
- d. Designed for, or capable of, enriching uranium minerals from yellow cake in quantities exceeding 500 pounds of U<sub>308</sub> per day.

Additionally, construction of any industrial facility with an estimated construction cost of at least \$50 million, which cost may be adjusted up or down each year using recognized construction cost indices, requires that a siting permit be obtained. An Office of Industrial Siting Administration was established to administer the Act. A seven-member Industrial Siting Council with membership appointed by the Governor (with the advice and consent of the Senate) comprises the decisionmaking body.

An application for a permit to construct must encompass all phases of a proposed activity, construction as well as operation. An applicant is required to file 50 copies of its application. The application as filed must include copies of the social, economic, or environmental impact of the proposed facility. An initial fee is assessed to cover the cost of processing the application.



The Wyoming Siting Act has a rather unique procedural structure, requiring that the council conduct an initial hearing shortly (40 to 60 days) after filing of a permit application, and that a permit be granted without further proceedings if the applicant can successfully demonstrate that:

1. A proposed facility will comply with all applicable law.
2. The facility will not pose a threat of serious injury to the environment, nor to the social and economic condition of present or expected inhabitants within the affected area.
3. The facility will not substantially impair the health, safety, or welfare of area inhabitants.

A facility which cannot meet these three criteria may be subjected to further study. A 180-day period is allowed for additional study, with provisions for two 60-day extensions. The applicant bears the cost of additional study. Following completion of the study a report is filed with the council, and a second public hearing is convened. The council must subsequently find that as to the areas of site influence:

1. The nature of the facility's probable environmental impact is acceptable.
2. By the design and location of the facility, any adverse environmental impact is reduced to an acceptable level.
3. The facility is compatible with public health and safety.
4. The facility is compatible with applicable state, intra-state, regional, county, and local land use plans, and with existing and projected utilization of nearby land.
5. The facility is designed in compliance with applicable state and local laws and regulations issued thereunder.
6. The Department of Environmental Quality has determined that the proposed facility or cumulative effects intensified by the facility will not violate state and federally established standards and implementation plans.
7. The facility represents an acceptable impact upon the environmental, social and economic well-being of the municipality and people in the area where the facility is proposed to be located.

The council is prohibited from granting a permit, following additional study if:

1. The estimated emissions or discharges of the facility will exceed state or federal standards, either individually or cumulatively with other sources.
2. The location of the facility conflicts with or violates state, intrastate, regional, county, and local land use plans.
3. The cumulative effect of the facility on the environmental, social and economic conditions in the area in conjunction with other facilities could substantially impair the health, safety, and welfare of people even though the nature of the probable environmental impact of the facility is found acceptable.

The council is allowed discretion in establishing permit terms and conditions. An opinion must accompany a decision. Parties aggrieved by a decision of the council may petition the state district court for judicial review of the decision.

The Wyoming process features a maximum of public participation, although such a participation might be somewhat limited by the minimal review period prior to initial hearing. The legislation further provides that written limited appearance statements may be filed within five days after the date set for hearing. These are made a part of the record even though the person submitting the statement is not accorded party status.

Another important aspect of the public participation which deserves mention is the makeup of the siting council. The membership can generally be expected to represent a cross section of Wyoming interests. The present council is comprised of businessmen, ranchers, and attorneys from locations throughout the state. The various members are continually aware of public interest in industrial development within the respective geographic areas, and the state at large.

The Wyoming industrial siting procedure as currently established does not constitute a one-step process. Separate proceedings are required by the Public Service Commission and the various divisions within the Department of Environmental Quality. The Act also provides for referral of portions of a permit application for review by state agencies which would otherwise have jurisdiction over certain elements of a proposed activity. Decisions of the agencies are binding upon the council, but only as to particular elements reviewed.

To issue a permit, the council must find that the activity proposed will comply with all applicable local, state, and federal laws. Further, an industrial siting application must contain a listing of other required state and federal permits and approvals, the status of each of these, and a projection of the time when the required applications will be made.

In the face of the above-cited provisions, respecting the role of other agencies, the siting administration has taken an approach which:

1. Incorporates comments by the 14 major agencies into the hearing record.
2. Provides that all applicable local, federal, and state laws must be complied with throughout each stage of planning and development of a proposed facility.

To date the siting administration has processed two applications for major facilities, Pacific Power & Light Company's Jim Bridger Unit No. 4, and Basin Electric Power Cooperative's Laramie River Station, Units 1-3.

Section 3, Chapter 1, of the council's rules and regulations provides a device by which a company may petition the council for a certificate of insufficient jurisdiction based upon two separate findings. One, the proposed facility is not an energy generation or conversion plant. Two, the estimated construction cost of the facility is less than \$50 million. Two applications have been filed under Section 3; Atlantic Richfield Company application with regard to Black Thunder Coal Mine and Utah Power & Light Company application for construction of two 400 MW units near Kemmerer, Wyoming.

In summary the following points are important attributes of the Wyoming siting process:

1. Very good comprehensive information requirements.
2. Allowance for maximum public participation throughout a permit proceeding; such participation is limited by the 40- to 60-day initial review period.
3. Provides a clearly defined procedural process for an applicant and other parties.
4. The legislation is working, as evidenced by accomplishments in the Wheatland, Wyoming, area, site of the Laramie River Station.

The following problems exist with the present Siting Act:

1. Initial review period of 40 to 60 days is too short.
2. There is no provision for a preconference hearing for clearly defining issues.
3. Overlapping jurisdiction among various agencies who issue other required permits and approvals but who are not required to issue permits and approvals within a

specified time frame. Also the siting legislation is ambiguous as to which agency has final responsibility for a proposed facility.

4. Mining operations which may singly, or in combination with other operations, pose substantial impact problems of a social and economic nature are not specifically defined as industrial facilities for purposes of the Siting Act.
5. The council cannot reject an application for lack of completeness when filed.
6. The citizens comprising the Industrial Siting Council are not adequately compensated for their services and should be properly compensated for time away from their respective forms of employment.

#### South Dakota

The interim Legislative Committee on Natural Resources is considering draft legislation that would include regulation of power plant siting and transmission and storage siting.

#### Montana

The Montana Major Facility Siting Act of 1975 charges the Department of Natural Resources and Conservation to maintain and to improve the clean and healthful environment for present and future generations, to protect the environmental life support system from degradation, to prevent unreasonable depletion and degradation of natural resources, and to provide for administration and enforcement to attain these objectives.

The Montana Legislature found that construction of additional power or energy conversion facilities may be necessary to meet the increasing needs for electricity, energy, and other products, and that these facilities have an effect on the environment and the welfare of the people.

A facility means each plant, unit, or other facility and associated facilities, except for oil and gas refineries:

1. Designed for, or capable of, generating 50 MW of electricity or more.
2. Designed for, or capable of, producing 25 million cubic feet of gas per day or more.
3. Designed for, or capable of, producing 25 thousand barrels of liquid hydrocarbon products per day or more.

4. Designed for, or capable of, enriching uranium minerals having an estimated cost in excess of \$250,000.
5. Designed for, or capable of, utilizing, refining, or converting 500,000 tons of coal per year or more or having an estimated cost in excess of \$250,000.
6. It also refers to electric transmission lines and associated facilities of a design capacity of more than 69 kilovolts to pipelines and associated facilities designed for or capable of transporting gas, water, or liquid hydrocarbon products or any geothermal resource including the use of underground space in existence or to be created for the creation, use, or conversion of energy or any underground gasification of coal.

A utility may not begin to construct a facility without first applying for and obtaining a certificate of environmental compatibility and public need. A facility which is constructed after a certificate is issued must be operated or maintained in conformity with the certificate including any terms, conditions, and modifications placed upon the granting of the certificate.

The application for a certificate must contain the following information:

1. A description of the location and the facility to be built.
2. A summary of any studies which have been made on environmental impact of the facility.
3. A statement explaining the need for the facility.
4. A description of any reasonable alternative location or locations for the proposed facility with comparative merits and detriments of each location and a statement of why the primary proposed location is best suited for the facility.
5. Any other information considered relevant by the applicant or requested by the board.

Within two years following receipt of an application for a facility the department shall make a report to the board which shall contain the department's studies, evaluations, recommendations, and other pertinent documents resulting from its study and evaluation and the final environmental impact statement.

The Departments of Health and Environmental Sciences, Highways, Intergovernmental Relations, Fish and Game, and Public Service Regulation must report to the Department of Natural Resources and Conservation relating to the impact of the proposed site on each department's area of expertise.

Upon receipt of the department's report, the board shall set a date for a hearing to begin not more than 120 days after the receipt of the report.

In a certification proceeding, the applicant has the burden of showing by clear and convincing evidence that the application should be granted and that all criteria has been met.

Within 90 days after the last day of the hearing, the board must complete their findings, issue an opinion, and render a decision either granting or denying the application as filed or granting it upon such terms, conditions, or modifications in the construction, operation, or maintenance of the facility as the board considers appropriate. The board may not grant a certificate unless it has found and determined that:

1. There is a basis of need for the facility.
2. The nature of the probable environmental impact has been determined.
3. The facility represents the minimum adverse environmental impact.
4. The facility will serve the interests of the utility system economically and reliably.
5. The location of the facility proposed conforms to applicable state and local laws and regulations.
6. The facility will serve the public interest, convenience, and need.
7. The state air and water quality agencies have certified that the proposed facility will not violate state and federally established standards.

In rendering a decision on an application for a certificate the board must issue an opinion stating its reasons for the action taken.

The board may waive compliance with applying for a certificate if the applicant makes a clear and convincing showing to the board at a public hearing that an immediate urgent need for the facility exists. If a facility has been damaged or destroyed, then there exists an immediate need for construction of a new facility or relocation of previous existing facilities to promote the public welfare.

Any party aggrieved by the final decision of the board on an application for a certificate may obtain judicial review of that decision by the filing of a petition in a state district court.

Annual long-range plans are to be submitted to the Department of Natural Resources and Conservation. This plan will be available to the public through the department. In evaluating the long-range plans the board and department must give consideration to:

1. Energy needs.
2. Land use impact.
3. Water resources impact.
4. Air quality impact.
5. Solid waste impact.
6. Radiation impact.
7. Noise impact.

A certificate may be revoked or suspended by the board for:

1. Any material false statements in the application or accompanying studies.
2. Failure to maintain safety standards or failure to comply with the conditions of the certificate.
3. Violation of any provision or orders of the board or department.

A copy of all plant siting laws and their applicable rules and regulations are available through the project coordinator.

The Western Governors' Regional Energy Policy Office has done an analysis of the states' facility siting laws. For easy reference and comparison this report has been duplicated in Appendix "A", page 162.

The second major area of research of this task force was that of the energy development policies and positions of the respective states. Each state's energy policy, though not formally designated as such, is given in the following summaries:

#### North Dakota

The North Dakota legislative energy policy seems to be that of "cautious development." Development is allowed but with controls. Energy-related laws presently in effect in the State of North Dakota include:

1. Reclamation of strip-mined land.
2. Surface owner rights upon tax sale of mineral rights.
3. Coal Leasing Practices Act.
4. Coal severance tax and impact program.
5. Air pollution control.
6. Water appropriation permits and conditions.
7. Surface Owner Protection Act.
8. Privilege tax on coal conversion facilities.
9. Plant siting.

North Dakota citizens were sampled at random via a survey instrument containing questions about goals for North Dakota energy development, natural resources, environment, economic growth, population, education, government, and human services. Although the results are not yet entirely complete, the developing trend of responses indicates that people of North Dakota prefer moderate development with environmental protection.

The Governor of North Dakota has set forth the executive energy policy which includes the following 12 points:

1. Adequate time will be allowed to consider all facets of each proposed energy development project and to allow for citizen involvement.
2. Political subdivisions and citizens must not suffer adverse economic impacts as a result of energy development.
3. A percentage severance tax must be adopted.
4. Priorities in the commitment of water must be carefully weighed.
5. All state laws will be adhered to by all energy developers, including the federal government.
6. As an energy resource state, North Dakota will work with the nation to help provide national energy needs, but not to supply the nation with energy resources for unnecessary demands.
7. The state must assume prime responsibility for guiding energy development.
8. North Dakota will not authorize the utilization of energy technologies which are likely to become obsolete in the near future.



9. New jobs and business opportunities created by energy development must be available to North Dakota citizens.
10. The state must maintain a perpetual trust fund through energy-related taxation.
11. North Dakota must provide guidance and incentives for industry to capture and utilize all potential byproducts of energy development.
12. Significant sites of cultural and scenic importance must be preserved.

At the present time there are a total of 1,251 acres in North Dakota on which mining has been completed and reclamation work is in progress. Sixty-seven acres in North Dakota have been released from bond as reclamation was completed. There are presently 19 active mining and reclamation permits with a total of 5,763 acres covered under these permits.

#### South Dakota

The energy development position of South Dakota could be characterized more as an energy consumer as opposed to an energy producer. Most of South Dakota's energy production is hydroelectric. Ten bkw's were generated in 1975. Of this 80 percent was hydro-electrical generation. Nearly 60 percent of the hydroelectricity is exported from the State of South Dakota. One new coal-fired generating plant, generating 440 MW, came on line in 1975. There is no measurable amount of natural gas or coal mined within the state. Thirty-eight thousand barrels of petroleum are produced per month, and uranium production is expected to start in two years.

Electrical consumption has grown seven percent in the past year. Petroleum consumption continues to grow two to three percent annually, and coal consumption rose from 8.8 trillion Btu's to 27.5 trillion Btu's due to electrical generation. Natural gas consumption will be reduced three percent annually due to industrial curtailments now occurring.

South Dakota faces the following three policy issues at the present time:

1. Facility Siting. No major construction is expected through 1980; however, the interim Legislative Committee on Natural Resources is considering draft legislation that would include regulation of power plant siting and transmission and storage siting. The study was directed by House Concurrent Resolution No. 506, which was passed during the 1976 Legislative Session. The committee has held two meetings to consider testimony on energy siting issues and

draft legislation. Final testimony and committee recommendations are expected at the next meeting to be held on November 8-9, 1976.

2. Water Development. Consideration will probably be given to prioritize end-use of water. Consideration will also be given to provide public financial assistance for water development through revenue bonds.
3. Conservation. Consideration of various conservation measures which would require legislative authority before becoming effective.

Governor Kneip has for some time pressed for an ongoing regional planning process. The Governor has offered a resolution to the Western Governors' Regional Energy Policy Office which calls for the development of such a planning process. The effort would hopefully result in polling individual concerns into a process which would allow balanced regional growth while responding to national pressures for accelerated development of the region.

### Wyoming

Wyoming's is an energy-oriented economy with an outstanding record of oil and gas production over the past 80 years, a record which ranks the state as one of the top 10 in oil and gas production. This production continued into 1975 but indicators began to show some decided dropoff from productive highs of past years. In future years, much more activity can be expected toward development of Wyoming's coal resources to help meet the nation's energy needs.

The states' coal resources are vast, estimated at more than 600 billion tons. More than 53 billion tons of these resources are potentially recoverable by underground and surface methods. Approximately 20 billion tons of strippable reserves exist within northeastern Wyoming, the majority of which (13.3 billion tons) are found within the Eastern Powder River Basin, and are concentrated in the Fort Union Coal Formation.

By comparison, during 1974, the state produced a total of 19,957,726 tons. Data are not yet available for 1975 production, estimated at 25 million tons. 1985 production will be at least 118.7 million tons (based on announced contracts) and could approach 300 million tons if large-scale coal gasification were to become a reality.

Energy development including strip mining, construction of coal-fired power plants, coal gasification plants, slurry pipelines, rail lines, dams and aqueducts, power transmission lines, and other projects and the technologies needed to support these activities poses some serious challenges for the state.

The 1973 Wyoming Legislature addressed itself to oncoming environmental problems by passing Wyoming's Environmental Quality Act. This legislation created the State Department of Environmental Quality comprised of the Air, Water, and Land Quality Divisions, and the Solid Waste Management Program. The department through its various divisions is responsible for maintaining air and water quality at or above federal standards, and for enforcing Wyoming's mined land reclamation laws, screening and issuing new mining permits, and enforcing mined land reclamation until mining operations are completed. Wyoming, at this point, believes its mined land reclamation laws are sufficient to do the job and is fearful that federal legislation in the area would only add red tape as new agencies are created to do the same job.

Currently, Wyoming's air and land quality requirements exceed federal standards. The Wyoming Legislature will continually review Wyoming's Environmental Quality Act to keep abreast of whatever protective needs become apparent as time goes on.

The two most important legislative acts passed by the 1975 Wyoming Legislature were the Industrial Development Information and Siting Act, and the Wyoming Land Use Planning Act. The Industrial Siting Act set up the machinery to review proposals and issue permits to construct and operate large industrial facilities. The Land Use Planning Act features the establishment of a mechanism for land use planning which will guide the growth and development of Wyoming and will assure the best and wisest use of Wyoming's resources.

Other legislation passed by the 1973, 1974, and 1975 Wyoming Legislatures dealt mostly with impact problems that will arise as a result of development. Notable among these acts is the Joint Powers Act allowing local governments to work across boundary lines in regard to financing and enforcement problems. The Community Development Act established an authority with power to issue bonds to be used in developing municipal, educational, recreational, cultural, and housing projects and facilities that may be necessary to protect the health, safety, and general welfare of the people of Wyoming. Legislation providing for a special coal tax to be used for impact assistance was passed in 1975. This money will be allowed to accumulate to a maximum of \$120 million and will be handled by the Wyoming Farm Loan Board.

The citizens of Wyoming widely recognize the state's water as its most precious resource. The limited availability of water poses a large cloud on the horizon of coal and mineral development. In relation to Wyoming's water regulations and available water supply for mining purposes, Wyoming's surface waters are controlled by a "first in time first in right" priority filing system. The great majority of Wyoming's surface waters are already filed upon or are bound by interstate compacts to other states. The most notable exception to this statement is in regard to existing surplus waters in western Wyoming's Green River drainage.

Underground water development has accelerated rapidly within the past few years. As areas become "critical" or control areas, a first in time first in right priority is set up. At present Wyoming has only two underground control areas but others will be created within a few years' time. The development of the underground deep Madison Formation waters is a hopeful prospect.

Wyoming's 1974 Legislature passed legislation providing that not more than 20,000 acre-feet of water annually could be appropriated from the Madison Formation in the Powder River Basin. This water is to be used for transporting Wyoming coal by slurry pipeline to Arkansas. The Act further provided that none of the water of the state, either surface or underground, may be appropriated, stored, or diverted for use outside the state without specific prior approval of the legislature, upon the advice of the state engineer. Slurry pipelines for transporting coal have since become quite controversial, but in Wyoming there seems to be a growing trend among the public to favor the export of as much coal as possible for conversion nearer to demand centers. Here again the limiting factor would seem to be water. It may in time prove necessary to adjust some of the existing interstate compacts, or look into the possibility of importing water from other states to completely develop and use Wyoming coal to supply regional and national energy needs.

All indications are that strip mining of Fort Union coal will proceed consistent with previous projections. Thirteen or more major new surface coal mines are either under construction, announced, or in advanced stages of planning. These are located in Converse and Campbell Counties and will serve regional, midwest, southeastern, and south central markets. A number of additional projects are contingent upon developing markets.

In summary, Wyoming, through affirmative legislative action, stands prepared to deal with the problems and prospects of energy-related industrial development. Accomplishments under newly enacted "impact legislation" are illustrative of this preparedness. The Industrial Siting Council has an important role in determining how the state deals with industrial impact. To date, the council has processed two applications for major facilities:

Pacific Power & Light Company - Idaho Power Company  
Application for Jim Bridger Unit No. 4

The application for a 500 MWe unit addition to an existing three unit plant near Rock Springs was approved February 2, 1976. The application was filed October 10, 1975, and heard before the council December 9-10, 1975. The unit is currently under construction.

Basin Electric Power Cooperative Application for Units 1-3  
of the Laramie River Station

The application for three 500 MWe units, a 104,000 acre-foot reservoir, and approximately 670 miles of 230 and 345 kV transmission lines was approved April 29, 1975. The application was filed December 12, 1975, and heard before the council February 23-27 and March 2-4, 1976. The permit requires a number of major actions on the part of the applicant toward mitigating adverse environmental, social, and economic impacts. Approval for construction of transmission facilities is being withheld pending a review of centerline locations. Construction of the plant has begun, with a local coordinating committee established to oversee impact alleviation measures in the project area.

The State Land Use Commission has initiated planning grants with the 23 counties, and has published guidelines for the planning process. Currently, policies and procedures are being developed for identifying and managing critical areas.

The Community Development Authority and the Wyoming Farm Loan Board have entertained a large number of proposals for community assistance. Joint powers loans in an amount exceeding \$26 million have been approved by the Farm Loan Board. The Community Development Authority has tentatively approved issuance of \$18 million in bonds. These actions involve approximately 20 Wyoming communities affected by energy development.

It is likely that over time some modification to existing laws or addition of new legislation may be in order. For the present, however, the Wyoming Legislature believes it has looked at the problems, attempted to forecast needs, and has provided suitable remedial legislation.

### Montana

Coal, by the process of elimination, is the most plausible source of additional energy to supply the United States. Montana sees coal as a part of the interim energy answer for the nation but also knows the effects of its development cause a number of serious problems for both this region, which contains some 68 billion tons recoverable by strip mining or nearly 50 percent of the country's strippable coal reserves, and for Montana, which contains more than any other state, some 43 billion tons of strippable coal. The severity of the problem depends, to a significant degree on the rapidity and magnitude of past and future development and on the regional and state ability to shape that development in the interests of the people.

In 1969 about a million tons of coal were mined in the state; by 1975, that figure had increased over 2000 percent to some 23 million tons. Montana coal is being shipped, for example, 1,070 miles to Columbia, Wisconsin; 1,200 miles to Chicago; and 1,300 miles by rail and barge to the Detroit area, the latter

even though shipping costs are about double those for West Virginia coal. Decker Coal Company, which is seeking to expand an existing mine and open another, recently entered into a 26-year contract to supply coal to Austin, Texas, a distance of about 1,600 miles. By 1980 even if no new contracts were concluded, Montana's annual coal production will exceed 40 million tons.

Coal-fired power plant capacity in Montana has also already increased 2000 percent, from 50 MW a few years ago to 1,100 MW, and the Colstrip 3 and 4 project will more than double that figure. Burlington Northern is actively investigating a plant known as Circle West which will annually consume as much as 13 million tons of lignite and 32 acre-feet of water in the production of ammonia, methanol-methyl fuel, and synthetic diesel fuel. Farmers Potash is considering a fertilizer plant near Scobey, already the site of air and water problems caused by Canadian coal development. A 500 MW plant utilizing the more efficient magnetohydrodynamics generation process is now being planned, and as Canadian supplies become more expensive and less available, a state task force is exploring the construction of a gasification plant, possibly at Glasgow.

As for what will occur beyond the specific proposals, one can only speculate based on projections completed by various organizations.

For instance the Western States' Water Council has predicted an increase of 8,260 mgw in Montana's coal-fired electrical generation by 1990. The National Petroleum Council has suggested that, under conditions of maximum development, Montana, by 1985, may also be the site of 14 gasification plants and two liquefaction plants. According to a federal study, the Northern Great Plains Resource Program, Montana can expect to be the site of 10 of the 25 power plant complexes, 16 of the 41 gasification plants, and an annual coal production of 393 million of the 977 million tons projected for the three-state area (Montana, Wyoming, and North Dakota) by the year 2000.

Staggering as these projections are, there are good reasons to believe they might be valid. First, coal is accessible and usable under existing technology. Second, it exists in amazing quantities. A third factor making the projected levels of development credible is the price of coal. Still a fourth factor is the emphasis given coal development by the federal government through eliminating constraints on availability of water, delaying implementation of air quality standards, financially subsidizing coal development, ending the moratorium on federal leasing avoiding comprehensive impact analysis, and resource planning.

Accomplishments of the state legislature in recent years include accepting the following responsibilities:

First, to minimize negative impacts through regulation of the pace and kind of development. To help do so in the past several

years Montana has enacted a Strip Mining Siting Act, a Strip Mining and Reclamation Act, a Coal Conversion Act, a Water Use Act, the Yellowstone Moratorium, and stringent air and water quality standards. Whether or not individual recommendations or decisions are agreed with, these laws do provide methods by which decision-making authority is exercised by governments responsible and responsive to the people of Montana. This is an absolutely essential element to ensure the negative impacts are minimized and the rate of development is controlled by those who must bear the brunt of the impacts.

A second obligation is to secure an equitable return for Montana coal which is to be used to compensate those who must pay the immediate costs of coal development and to ensure the economic stability of the state and well-being of its citizens after fossil fuels are exhausted or no longer desired. In the process of meeting this obligation, Montana has raised its tax on coal to about 30 percent of the price at the mine. Two additional coal tax programs are administered by the Department of Natural Resources. One is the Renewable Resources Development Program whereby low interest loans will be made by the Board of Natural Resources and Conservation, on the recommendation of the department to farmers and ranchers for projects to develop or preserve renewable resources. The other program is the Alternative Energy Research Program which offers assistance to innovators developing alternative energy sources such as solar wind, wood, water, geothermal, etc.

The third obligation with regard to coal development is to begin the process of specifying what separate states and the region want for the future.

Another tenet of the Montana energy policy could be a statement to the effect that coal should not be considered the sole solution to energy problems. Montana's position in this regard has already been affirmed in legislation--encouraging investment in nonfossil fuels, promoting energy conservation in buildings, and providing for the research, development, and demonstration of alternative energy resources.

Still another feature of state energy policy could be a restatement of an obligation to share resources with the nation.

The Energy Development, Regulation, and Plant Siting Task Force was also interested in energy facility siting or transmission line siting on or near Indian reservations. The project coordinator will be monitoring Indian tribal actions with regard to energy developments and plant siting on or near Indian lands. All useful information will be distributed to the task force membership.

This task force was also interested in federal actions affecting energy development or facility siting in the Fort Union states. The project coordinator will be watching and monitoring federal actions in this regard. The task force reviewed the national

energy development policy published by the United States Energy Research and Development Administration. Each task force member has a copy of this national policy.

The task force arranged for a presentation on federal mineral leasing of coal lands in the Fort Union region. Mr. Jack Horton, Under Secretary of the Department of the Interior, was present to give this report. Mr. Horton explained that with federal leases one must produce or perish (lose the lease). One must develop a 10-year plan for developing federal coal leases. Mr. Horton also noted that because a federal reclamation law has not been passed, federal leases will be reclaimed under adopted state reclamation regulations. The state agency will regulate the reclamation on federal land. The Department of the Interior is presently reviewing state standards of reclamation. The Department of the Interior is also determining if more federal coal is needed and which coal should be leased and when. Mr. Horton commented that the federal government will not let speculators hold water; rather, they must have a plan for water use. Mr. Horton also mentioned that royalty revenues returned to the states have been increased.

Several presentations were made to the task force by the program director of the Indian Lignite Manpower Program of United Tribes Educational Technical Center, Bismarck, North Dakota. The program director also made the same presentations to the Social and Economic Impact Task Force of the Fort Union region and his comments are summarized in the final report of that task force.

The Common Data Element and Information Exchange Task Force sent a resolution to each of the other six task forces requesting common data elements be defined and submitted to the Common Data Element Task Force. A copy of this resolution can be found in Appendix "B", page 172. In response to this request for information, the task force members approved a list of common elements used in plant siting (see Appendix "C", page 173). The task force also submitted to the Common Data Element and Information Exchange Task Force a copy of the plant siting laws of North Dakota, Montana, and Wyoming, for their reference if they wish to further define common data elements for plant siting.

The Energy Development, Regulation, and Plant Siting Task Force was interested in finding out facts about slurry transportation of coal in the Fort Union region. Mr. W. Pat Jennings of the Slurry Transportation Association, Washington, D.C., was invited to testify before the task force. A copy of his presentation is given in Appendix "D", page 176.

The task force was very concerned about how well the present plant siting laws in their respective states were working; therefore, representatives of industry throughout the three-state area were invited to testify before the task force. Industry representatives included Mr. Duane Bye, Basin Electric, Bismarck, North Dakota; Mr. Robert Moench, Pacific Power and



Light, Casper, Wyoming; and Mr. John Ross, Montana Power, Butte, Montana. The industry people pointed out various difficulties with working within the present plant siting laws. The following is a summation of those problems:

1. The 10-year lead time needed in planning for a facility before it will actually go into production. Appendix "E", page 187, details this 10-year process. (This chart was developed by Basin Electric.) This 10-year lead time means that funds must be committed far in advance, greatly increasing the risks involved. It also means that utilities will increasingly be involved in various phases of planning for two or three projects at a time. Factors contributing to the lengthening of the times are as follows:
  - a. Increasingly numerous federal and state regulations. (See Appendix "F", page 188.)
  - b. Greater construction time required for the complex environmental equipment and controls.
2. Until major approvals and permits are received a project operates on short-term relatively high cost money for:
  - a. Studies of impact and studies for site location.
  - b. Ordering of major equipment with expensive cancellation charges.
3. Another difficulty arises from the fact that considerable duplication exists between siting regulations and regulations of other agencies. Any disagreement between two or more groups delays the project.
4. A perplexing situation arises when different agencies require approval from other entities prior to issuing their own permit and in turn those entities are to be waiting for the different agencies to issue a permit before they can act.
5. Continually changing environmental regulations also poses problems, especially when it means having to redo plans.
6. A potential problem is that of discrepancies between the regulations of different states, particularly in the case of transmission lines.
7. There is considerable concern about the amount of data required for alternative sites. It is extremely expensive to locate one site, let alone two.

8. Restrictions of locating transmission lines exclusively on section lines, quarter lines, or along railroads or other existing facilities are not necessarily in the best interest of either the landowner or the consumer. Electric generating and supplying companies use a system of "constraint mapping" to site major transmission facilities by landsat imagery.
9. A problem seems to be arising in that privately owned utilities and generating plants are getting into an adversary relationship with state government and therefore cannot mutually work out problems.
10. Every delay is very expensive and those costs have to be carried by the customers.
11. The permit process should be simplified and the duplication in public hearings eliminated if irrelevant and repetitive.
12. The social and economic impact assistance to communities is considered inadequate. The social-economic impact of industrial growth could be much alleviated if state laws provided for public revenues to be channeled to the appropriate communities in advance of impact. Communities and industries could work together to provide maximum mitigation of social-economic impact.
13. Proceedings have lasted too long. Specific time deadlines should be provided within the laws.
14. There should be more state and federal cooperation to avoid duplication.

Other solutions suggested by industry representatives to improve the plant siting laws are as follows:

1. To eliminate irrelevant and emotional testimony and long cross examinations in public hearings, two hearings should be held: one for the public and one on technical information related to the plant.
2. Siting inventories should be done in each state to select all possible future sites.
3. The siting process should focus on need.
4. The siting process should focus on how best a project and its effects can be mitigated.

A copy of Mr. Bye's presentation is attached in Appendix "G", page 192, for reference.

Following the completion of the last meeting, the task force membership toured the lignite gasification pilot plant in Rapid City, South Dakota (see Appendix "H", page 202, for fact sheet on the gasification plant). To date all commercial gasification plants are using the lurgi process. The process used by this pilot plant is called the CO<sub>2</sub> Acceptor Process. The lurgi process is actually more expensive than the CO<sub>2</sub> Acceptor Process.

Appendices "I", page 205, "J", page 209, and "K" page 217, are copies of the first, second, and third meeting minutes for further details on task force discussions.

#### Recommendations and Actions

The task force voted to continue by holding a meeting in the fall of 1977 after the legislative sessions and after any new rules and regulations have been completed. The task force will then, at that point, decide future research areas or future meeting agendas.

WESTERN GOVERNORS' REGIONAL ENERGY POLICY OFFICE

Staff Analysis of

STATE POWER FACILITY SITING LAWS

This Information from the Western Governors' Regional Energy Policy Office summarizes existing Power Facility Siting legislation in the WGREPO states and provides a summary table which compares provisions of the various acts. Also included are summaries of some of the more innovative provisions of power facility siting legislation in non-WGREPO states.

MONTANA - Major Facility Siting Act, 1975

This Act applies to:

1. Facilities designed to generate 50 mw. of electricity or more or additions costing \$250,000 or more.
2. Facilities designed to produce 25 million cu. ft. of gas per day or more or additions costing \$250,000 or more.
3. Facilities designed to produce 25,000 barrels of liquid hydrocarbon products per day or additions costing \$250,000 or more.
4. Facilities designed to enrich uranium minerals or additions costing \$250,000 or more.
5. Facilities capable of utilizing 500,000 tons of coal per year or more or additions costing \$250,000 or more.
6. Each electric transmission line 69 kv. or more, excluding transmission lines 230 kv. or less under 10 miles in length.
7. Pipelines and facilities for gas, water, or liquid hydrocarbon of a size set forth in 2 and 3 above.
8. Use of geothermal resources.
9. In situ gasification of coal.

Certification Authority

A person may not commence to construct a facility in the state without first having obtained a certificate of environmental compatibility and public need from the board of natural resources.

## Criteria

An application for a certificate must contain a description of the proposed location, a summary of environmental studies done on the facility, an explanation of need for the facility, and a description of comparative merits and detriments of each alternative site considered. Upon receipt of an application, the Department of Natural Resources will study and evaluate the proposed facility and report to the Board 2 years following receipt of a facility application, 1 year following an application for a transmission line under 30 miles.

## Criteria

The Board must determine the need for the facility, the probable environmental impact, if the facility represents the minimum adverse environmental impact, if the facility is consistent with regional plans for utility expansion and if the facility conforms to state and local law and is in the public interest.

The Departments of Health and Environmental Sciences, Highways, Intergovernmental Relations, Fish and Game, and Public Service Regulation are required to report to the department relating to the impact of the proposed site on their area of expertise.

## Fees

Fees are based on a complex formula based on the value of a facility. The cost may exceed two million dollars for a large facility. Money is used by the department in compiling the information required for rendering a decision. The applicant is entitled to an accounting of monies expended and a refund of unused funds.

## Hearing

The parties to a hearing include the applicant, each affected municipality and governmental agency, any person living in the affected area, any non-profit organization formed to promote conservation or protect the environment and the Department of Natural Resources.

## Long-Range Plans

Each utility and person contemplating the construction of a facility within the next 10 years must annually submit to the department a long-range plan for the construction and operation of facilities. The 10-year plans should include not only siting considerations but also the efforts by utilities to coordinate land use and demand projections and an explanation of the demand projection. The department must evaluate all sites proposed for construction in the next five years for a wide range of considerations specified in the law. Included are: energy

projections and utility promotional activities which may be related to these projections; alternative sources of energy; land use and environmental impacts; etc. A total of 57 review characteristics are specified.

#### Monitoring and Enforcement

The Board shall monitor the operation of all certified facilities. A violation of this Act is subject to a civil penalty of not more than \$10,000 or imprisonment for up to one year or both.

#### Moratorium

The 1975 Legislature also enacted a temporary moratorium on plant siting approval. The Act provides for a suspension of action on certain utility siting applications for certificates of environmental compatibility and public need until a comprehensive Montana energy policy and plan can be formulated. Presently, the plan has been formulated but has not been approved by the Legislature.

#### NORTH DAKOTA - Energy Conversion and Transmission Facility Siting Act, 1975

This Act applies to:

Facilities and additions designed for: (1) the generation of 50,000 kw. or more of electricity; (2) manufacture or refinement of 100,000 cu. ft. or more of gas/day; (3) manufacture or refinement of 50,000 barrels of liquid hydrocarbons per day; (4) the enrichment of uranium minerals; (5) transmission facilities with a design of 200 kv.; (6) a transmission line and associated facilities with a design of 62 - 200 kv, if the facility does not follow section lines, property lines, or roads; (7) a gas or liquid transmission line.

#### Certification Authority

No utility can begin construction without first having obtained a certificate of environmental compatibility from the Public Service Commission. The PSC may appoint one or more advisory committees to aid in site evaluation, but they must contain a majority of public representatives.

#### Criteria

The Commission initiated a public planning process where all interested persons could participate in developing criteria and standards to be used by the Commission in preparing a statewide inventory of potential sites and transmission corridors. As of July 1, 1976, the inventory of potential sites and criteria used in developing the inventory was published. Sites for power facilities and transmission lines can only be selected from the inventory of potential sites.

An application for a certificate will contain: a description and size of the facility, any EIS's done on the facility, identification of the preferred site, merits and detriments of the site. The Commission will evaluate the suitable sites and corridors for specific types of facilities on any sites proposed by the utilities. The evaluation will be based on a variety of factors, including, but not limited to, environmental, social, and economic impact, use of waste energy, alternatives to the proposed site, state, local and private developers' plans.

### Fees

The fee is \$500/\$1 million of investment. It is to be not less than \$5,000 nor more than \$150,000. The money may be expended for the administration and enforcement of the Act.

### Hearings

Throughout the site and corridor selection process, the Commission will adopt a broad-based citizen participation process. The Commission will hold public hearing to afford interested citizens an opportunity to be heard regarding the inventory of sites and criteria used in site selection. At least one hearing will be held in each county where a site is being considered.

### Long-Range Plans

Every utility who owns or operates or plans to within the next 10 years is required to submit annually a 10-year plan which includes:

1. A description of the location, size, and type of a facility.
2. A description of the efforts of the utility to coordinate and plan with other utilities.
3. A description of the effort to involve environmental and land use agencies in the planning process, as well as to minimize environmental problems.
4. A statement of projected demand for services rendered by the utility for the 10 years and a description of the extent to which the utility will meet the demand.

Every utility who owns or operates or plans to own or operate a power facility or transmission line within five years must submit annually its plans for facilities to meet and fulfill the projected future demands covered in 10-year plan for service, including a description of the facility, identification of facilities to be removed from service, location of preferred site, and at least one alternative site, both of which must be selected from the inventory.

## Enforcement and Monitoring

The certificate will be revoked for failure to comply with the terms and conditions of the certificate. Failure to comply with the Act is subject to a civil penalty of up to \$10,000.

## WYOMING - Industrial Development Information and Siting Act, 1975

This Act applies to facilities designed:

1. To generate at least 100 mw. of electricity or an addition to a facility to increase capacity by 100 mw. or more.
2. To produce at least 100 million cu. ft. of synthetic gas per day or an addition to an existing facility to increase capacity by 100 million cu. ft. per day.
3. To produce 50,000 barrels of liquid hydrocarbon products/day or additions to existing facilities to increase capacity by 50,000 barrels/day.
4. To enrich uranium minerals from U308 in quantities exceeding 500 lbs of U308/day.
5. Any industrial facility costing \$50 million or more (1975 dollars).

## Certification Authority

This Act created within the Governor's Office the Industrial Siting Administration and the Industrial Siting Council. The Council consists of seven members who are residents of Wyoming. Members of the Council are appointed by the Governor. In addition, the administrative head of each state agency is requested to attend Council meetings and serve in an advisory capacity. No one is permitted to construct a power generating facility as defined previously without having first obtained a permit from the Council.

## Criteria

An application for a permit must contain a description of the facility, time schedule, number of employees, why the site was chosen, copy of all EIS's, inventory of discharges and solid waste, procedures to avoid adverse effects to humans and animals, plans to alleviate social, economic, and environmental impacts covering 15 specific areas of concern, cost of construction, federal and state permits required, compatibility with state and local plans. Upon receipt of an application, the Office will undertake an intensive investigation of the site, considering very explicit parameters defined in the Act which include need for the facility, land use impacts, air quality impacts, water resource impacts, solid waste impacts, and social



and economic impacts. Upon receipt of the report, the Council will set a hearing date.

### Fees

A fee for the permit is not to exceed 1/2 of 1% of the estimated construction cost of the facility or \$100,000, whichever is less. If additional study is required, the applicant shall pay an additional fee. The total fee will not exceed \$1 million.

### Hearing

The parties to the permit hearing include: (1) the applicant; (2) each local government which will be primarily affected; (3) any local person or non-profit environmental and conservation group which will be affected, provided that they file 10 days prior to the hearing; (4) a person may make a limited appearance by filing a written statement five days prior to the hearing.

### Long-Range Plans

Each person operating a facility is required to submit annually its long-range plans to the office for review. Plans should include facilities which are projected to commence during the next 10 years.

### Enforcement & Monitoring

The Council has authority for monitoring the operation of all facilities granted permits under the Act. A violation of the Act is subject to not more than \$10,000 fine or imprisonment of not more than one year or both.

### Facility Siting Laws in Non-WGREPO States

Many non-WGREPO states have been innovative in their power facility siting legislation. Following are summaries of provisions found in non-WGREPO states' legislation which are not found in most of the WGREPO facility siting legislation and might be of interest to the WGREPO states.

#### Maryland - Power Plant Siting (Senate Bill 450)

The Maryland Power Plant Siting Law was passed in April, 1971, and has been in effect since January 1, 1972. The law established a mechanism, the Environmental Trust Fund, which is unique to Maryland's Siting Act, to acquire suitable sites in the name of the state.

The Environmental Trust Fund is to be independently funded by means of a surcharge on all electricity generated in the state. The primary function of the fund is to finance the operation of the Power Plant Environmental Research Program, which includes

research on the environmental effect of electricity generation, the monitoring of the environmental effects of existing power facilities, the evaluation of environmental effects of proposed electric power facilities plant sites, the evaluation of the environmental effects of electric power technologies, the investigation of possible constructive uses for waste heat, and the analysis of power facility location on land use in the state.

The Public Service Commission and Secretary of Natural Resources and the utility companies are required to work together to identify possible sites for the construction of new electric power plants. Taking into account the power needs and means for meeting these needs, the Department of Natural Resources must identify, on the basis of environmental consideration, acceptable locations and commence detailed investigations of those sites submitted by the utilities company. The information developed in the Power Plant Environmental Research Program is used in the preparation of detailed environmental impact statements on each site.

The Secretary of Natural Resources is charged with the duty of acquiring a number of desirable sites in the name of the state. At all times, the state holds four to eight sites suitable for power plant siting. The number of sites is dependent upon growth information supplied by other agencies.

#### Minnesota Power Plant Siting Act, 1973

Minnesota's Plant Siting Act established a public planning process very similar to that of North Dakota. In Minnesota, the Environmental Quality Council has initiated a public planning process whereby all interested persons can participate in developing the criteria and standards to be used by the Council in preparing an inventory of potential sites for large electric power generating plants and high voltage transmission line corridors. The Council inventories all potential sites and publishes the inventory and the criteria used in developing the potential site and corridor inventory.

The criteria established includes, but is not limited to: (1) minimize population displacement; (2) minimize adverse health effects; (3) prevent the destruction or major alteration of land form, vegetation types, or rare wildlife; (4) minimize visual and audible impacts; (5) maximize reliability with relation to climate; (6) locate near large load centers; (7) allow for larger, rather than smaller, generating capacity, and (8) conserve energy and utilize by-products.

#### Washington - An Act Relating to Energy, 1976

Under the Washington Siting Act, certification or denial of the certificate is made by the Governor upon the recommendation of an Energy Facility Site Evaluation Council. The Council is composed of representatives of 15 state agencies that have

regulatory responsibility over, or interest in, the location of power plants. An additional member is appointed by each County Legislative Authority for deliberation on a site located within its jurisdiction.

The legislation also requires the Attorney General to appoint an assistant attorney general or a special assistant attorney general as a counsel for the environment who represents the public and its interest in protecting the quality of the environment until such time as the certification is issued or denied. The regulations allow for any person whose interests may, as a practical matter, be impaired by the disposition of the site application to petition for intervention.

#### California - State Resources Conservation and Development Act, 1974

The California legislation provides for a five-member commission, appointed by the Governor, consisting of an engineer or physical scientist, an attorney, a person with expertise in the field of environmental protection, an economist with a background in natural resource management, and a member from the public at large. These members serve on a full-time basis. No member shall have received a portion of his income from a public utility in the last two years. Members of the Commission shall be appointed for five-year terms.

The Commission has the duties to: (1) undertake continuing assessments of trends in the consumption of electrical energy and analyze the social, economic, and environmental consequences of these trends; (2) collect from the electric utilities, gas utilities, fuel producers and wholesalers, and other sources, forecasts of future supplies and consumption of all forms of energy; (3) independently analyze such forecasts in relation to statewide estimates of population, economic, and other growth factors and in terms of availability of energy resources; and (4) contract other agencies to carry out research and development into alternative sources of energy, improvements in energy generation, transmission, and siting. Every 2 years, the Commission submits to the Governor and legislature a comprehensive report designed to identify emerging trends relating to energy supply, demand, conservation, public health, and safety factors.

The Commission has the exclusive power to certify all sites and related facilities in the state. Each person proposing to construct a power facility submits to the Commission a notice of intent to file an application for a certificate. The notice of intent contains at least three alternative sites and related facilities, at least one of which is not located in whole or in part in the coastal zone. The Commission will not approve the notice of intent unless it finds the two alternative sites and related facility proposals considered as acceptable. The Public Utilities Commission issues the certificate of public convenience and necessity only after the utility has obtained a certificate from the Commission. The Commission requires as a condition of

certification of any site and related facility that the applicant acquire, by grant or contract, the right to prohibit development of privately owned lands in the area of the proposed site which will result in populations in excess of the maximum which the Commission considers necessary to protect the public health and safety.

Prepared by

Nancy Carlisle  
Planning Intern

# SUMMARY TABLE

## A Comparison of Power Facility Siting Laws in Montana, Wyoming, and North Dakota

<u>Provisions of State Acts</u>	<u>Montana</u>	<u>North Dakota</u>	<u>Wyoming</u>
<u>Acts &amp; Dates</u>	Major Facility Siting Act, 1973, 1975	Energy Conver- sion & Trans- mission Facility Siting Act, 1975	Industrial Develop- ment Information & Siting Act, 1975
<u>Act Applies to</u>	Elect, gas, hydrocarbon, coal fac, uran- ium enrichment, elect trans. lines, gas, water, liquid hydrocarbon, in-situ coal gas'cation	Elect, gas, hydrocarbon fac, uranium enrich- ment, elect, gas, or liquid trans lines	Elect, syngas, hydro- carbon fac, uranium enrichment, fac over \$50 million
<u>Site Certifica- tion Authority</u>	Board of Natural Resources & Conservation	Public Service Commission	Industrial Siting Council
<u>Size &amp; Composition of Authority</u>	Size of the Board	Size of the PSC	7 members appointed by the Governor
<u>Method of Site Acquisition</u>	Cert. of Env. Compatibility & Public Need	Certification of Site Compatibility	Permit
<u>Application Fee</u>	Varies - may exceed \$2 million for large fac	Varies - \$5,000 to \$150,000	Varies - \$100,000 max. If additional study is needed, \$1 million max.
<u>One Stop Provisions</u>	2 Stop	Yes	No, other agencies retain jurisdiction
<u>Utility Long- Range Plans Required</u>	Annually must submit 10-year plans	Annually must submit 10-year plans and 5-year facility develop- ment plans	Annually must sub- mit 5-year plans
<u>Provisions for Act Enforcement</u>	Civil penalty \$10,000 - 1 yr. in prison max.	Civil penalty \$10,000 max.	Civil penalty \$10,000 - 1 yr. in prison max.

RESOLUTION OF THE  
COMMON DATA ELEMENT AND INFORMATION EXCHANGE TASK FORCE  
TO ALL FORT UNION REGIONAL TASK FORCES

WHEREAS, part of the charge of the Common Data Element and Information Exchange Task Force is to encourage development and compilation of a common data element dictionary; and

WHEREAS, task force discussion at its meeting of June 9, 1976, indicated the need for such a definition of terms; and

WHEREAS, the task force must initially define what a common data element dictionary should contain; and

WHEREAS, it was the general concensus of the task force that the dictionary not be a definition of terms, but an explanation of base data that is used in doing impact statements, energy demand studies, population projections, etc.

BE IT RESOLVED, that inasmuch as each task force possesses expertise in its own area, the Common Data Element and Information Exchange Task Force recommends that each task force develop its own definitions for their particular area of study and forward them to the Common Data Element and Information Exchange Task Force as soon as possible after the next meeting of the other task forces.

**THE UNIVERSITY OF WYOMING**

UNIVERSITY STATION, BOX 3355

**LARAMIE, WYOMING 82071**

October 11, 1976

Ms. Sheila Miedema, Project Coordinator  
Fort Union Regional Task Forces  
North Dakota Legislative Council  
State Capitol  
Bismarck, North Dakota 58505

Dear Ms. Miedema:

The subcommittee to respond to the request of the Common Data Element Task Force reported that it appeared to be difficult to start defining terms until agreement is reached on what data elements are common to the several task forces. The subcommittee felt that a "generic terms" approach is appropriate, but that it is likely that many terms (e.g., those in siting acts) were defined in the statutes.

Subcommittee member Dr. John Brophy prepared a plant siting data catalog which was submitted for Task Force comment. The data elements, if agreed on by this Task Force and if generally acceptable, could be placed in the Conference Report "dictionary."

Sincerely yours,

A handwritten signature in dark ink, appearing to read "E. Gerald Meyer".

E. Gerald Meyer  
Vice President for Research

Enclosure

Data required for evaluation of potential energy conversion plant sites and transmission corridors.

- I. Current status data (baselines)
  - A. Atmospheric data
    1. Temperature data from nearest official recording station.
    2. Precipitation data from nearest official recording station.
    3. Air quality data from nearest official recording station.
    4. Wind data from nearest official recording station.
    5. Cloud data from nearest official recording station.
  - B. Lithologic data
    1. Soils data from existing or specially-made maps.
    2. Geologic data including mineral resources from existing or specially-made maps and cross sections.
  - C. Hydrologic data
    1. Surface water data from existing reports or specially-made studies (location, quantity, quality).
    2. Subsurface water data from existing reports or specially-made studies (location, quantity, quality).
  - D. Biologic data
    1. Animal data from existing or specially-made studies.
    2. Plant data from existing or specially-made studies.
  - E. Sociologic and geographic data
    1. Population data from existing or specially-made studies.
    2. Employment data from existing or specially-made studies.
    3. Land use data from existing or specially-made studies.
    4. Transportation network data from existing or specially-made studies.
    5. Esthetic values data from existing or specially-made studies.
- II. Data on planned energy conversion plant or transmission system.
  - A. Plant or transmission system type and design data.
  - B. Location data, including alternatives.
  - C. Size data
    1. Plant size and production capacity data, or
    2. Transmission corridor width, length and capacity.
  - D. Input resources and facilities data
    1. Location, quantity, quality of input resources (coal, water, electricity, etc.).
    2. Type and location or mine-to-plant transportation network needed.
  - E. Work force data
    1. Construction force data.
    2. Operation force data.
  - F. Emission data (stack effluents, waste water, heat, radioactivity, etc.).
  - G. Plant or transmission system hazards (including accidents) and control data.
- III. Impact data
  - A. Probable impact on natural systems
    1. Probable effects of construction, including possible lowering of esthetic qualities.



2. Probable effects of plant effluents on atmosphere, water (surface and subsurface), soils, plants, wild and domestic animals, and man (including esthetic values).
3. Probable effects of hazards on wild and domestic animals and man.
4. Probability of accidents and probable effects.
- B. Probable sociological and geographic impact
  1. Probable employment impact (including displacements).
  2. Probable population impact (including displacements).
  3. Probable economic impact.
  4. Probable impact on social services (schools, hospitals, police, fire protection, etc.)
- IV. Plans for dealing with impact.

Remarks of W. Pat Jennings, President of Slurry Transport Association, prepared for delivery October 4, 1976, at a meeting of the Fort Union Regional Task Force on Energy Development, Regulation and Plant Siting in Rapid City, S.D. :

I am grateful for this opportunity to be here with you today.

I expect I will learn much more from you than you will learn from me. I have always heard that someone who is as much as 100 miles from his home is an "expert" and if he has a briefcase, he is an "authority." I am much more than 100 miles from home today and I have a briefcase, but I assure you that I do not consider myself to be either an expert or an authority.

On the contrary, I am very conscious of the fact that I am not only a relative newcomer to the field of energy transportation, but I am an Easterner. And even though the streams that drain my farm in southwest Virginia flow to the Mississippi River, just as they do out here, I realize that your concerns and your problems are not always the same as those that my neighbors and I face in the Highlands of Virginia.

I am confident that we have much in common despite the miles that separate our homes. I found this to be true when I was a Member of Congress. My colleagues from this part of the country and I generally shared the same ideals, the same sense of justice and of fair play, and the same love of country. And when there were differences of opinion, there was a willingness to seek the other person's point of view, to exchange ideas and information in an effort to find a common meeting ground that would provide the greatest benefit to the greatest number of citizens.

I think that is what this task force is all about. And that is why I am so glad to be here. I know I can learn from you and I believe I have information and a point of view that will be helpful as you seek the best possible solutions to the problems of developing your coal resources in this four state area.

The nation's future energy needs dictate a greatly increased reliance on coal. And if production increases as predicted, then it follows that the transportation system should increase proportionately.

Fourteen years ago, President John F. Kennedy came here to South Dakota to dedicate the Oahe Dam at Pierre, and I want to recall for you a portion of what he said there on the banks of the Missouri River. President Kennedy declared, and I quote:

"...Surely a continent so rich in minerals, so blessed with water and a society so replete with engineers and scientists can make and must make the best possible use of the bounty which nature and God has given us, public and private, federal and local, cooperative and corporate. We cannot prevent other people in this country from developing their resources. We look forward to the day when energy will flow where it is needed. We cannot permit railroads to prevent coal slurry pipelines from conveying the resources of our mines..."

And yet that is exactly what is happening. Let me explain.

Coal is very versatile. It can be used and transported in many ways. It can be converted as it comes from the mine and then delivered to the consumer over high voltage transmission lines as electricity or through pipelines as gas or synthetic liquid fuel.

But usually, coal is carried from the mine mouth for conversion into energy at some distant point near the ultimate consumer. Most coal is hauled from the mines by the railroads with lesser amounts moving by barge or truck.

It is illogical, but true, that coal that has been converted into energy can move through a pipeline, but coal in its natural state cannot, although pipeline

transportation of pulverized coal is technically feasible and economically attractive. Coal can't go through a pipeline in this country simply because the railroads say it can't.

Coal pipelines are a transportation option that you should not be denied simply to protect the existing railroad monopoly on coal traffic.

We all know of the success of oil and gas pipelines. The technology of large diameter, long-distance pipelines is well developed. In the past century, hundreds of thousands of miles of such lines for crude oil, petroleum products and natural gas have been laid all over this country. Pipelines are commonplace and all the experience gained from those pipelines has been extended to slurry pipelining. The only significant difference is in the nature of the pumps.

Pipelines are presently transporting over two billion ton-miles a year of coal, iron, limestone, copper, phosphate and similar materials in various parts of the world. I have several slides to show you that will give you some of the history and background of coal slurry pipelines so you will have a better understanding of the role they can play in transporting coal in the future.

The first patent for a coal slurry pipeline was issued in 1891 but more than 50 years passed before a commercial coal slurry pipeline became a reality in this country. When the largest consumers of coal turned to oil and natural gas after World War II, coal suffered a severe depression. Any economies gained by improved production methods were eaten up by increasing rail transportation costs. To meet this problem and try to stay competitive with fuels that moved by pipeline, (slide 1) the Consolidation Coal Company of Pittsburgh began experiments in 1950 with a coal slurry pipeline. (slide 2) The result was a 108 mile coal slurry line from a mine near Cadiz, Ohio, to the Cleveland Electric Illuminating Company's Eastlake Generating Station. Opened in 1957, that first commercial pipeline was only 10 inches in diameter, but it delivered more than 7 million tons of coal over a 6 year period.

Clearly, it was a successful operation.

The Ohio pipeline not only demonstrated the technical feasibility of coal slurry pipelines but it cut costs and forced fundamental changes in coal transportation methods. During construction, the rail charge for hauling coal jumped 62 cents to \$3.25 a ton. By the time the line was finished, the rate was up 22 cents more to \$3.47. Finally the railroads responded to the pipeline's challenge by introducing an innovation of their own-- the unit train, and they reduced the rate on all coal in that area to \$1.88 a ton. With such a sharp reduction in transportation charges, the Ohio pipeline was deactivated, having accomplished its cost cutting mission successfully.

The next coal slurry pipeline in this country was (slide 3) the Black Mesa line, built in 1970 to carry coal from the Black Mesa Mine in Arizona (slide 4) to the Mohave Generating Station in the southern tip of Nevada. The construction of this pipeline to carry coal over (slide 5) 273 miles of rugged terrain was an incredible and imaginative feat of engineering. It stands as a good example of the type of resourcefulness we must have to provide for our energy needs in the future. (slide 6) The Black Mesa line, the world's longest solids-carrying pipeline operates on water drawn from a deep underground aquifer and is powered by pumps such as these. Without a doubt, this is a "pipe dream" come true, another American success story. From the time the Black Mesa line began commercial operation, it has been available 99 per cent of the time and it delivers coal at the cost of alternate transportation.

Some of you are wondering, I am sure, why I say the railroads are blocking construction of coal slurry pipelines and yet I have just told you of the successful, current operation of such a pipeline. I should tell you also that the Black Mesa Line is operated by a subsidiary of the Southern Pacific Railroad.

With 12 years of successful operation on two different slurry pipelines, it is natural that when the oil embargo forced a re-examination of our own energy resources, coal slurry pipelines should be considered as a means to help transport the

additional quantities of coal energy this country needs. (slide 7) Several routes for coal slurry pipelines are proposed to deliver western coal to the South, the Southwest and the Pacific Northwest. Two of the proposed routes go to Texas, which for decades has been the principle energy supplier of the United States. Texas exports more than half (53%) of the natural gas it produces and almost three-quarters (73%) of its oil. Much of the natural gas that Texas keeps is used as boiler fuel-- 95% of electric power generated in that state comes from natural gas. To stop this wasteful practice, the Texas Railroad Commission has ordered that industrial boilers begin the conversion to other fuels; that's coal, primarily. The same necessity for conversion exists in Arkansas and other states where they used to burn off natural gas as a useless by-product of oil. They are seeking a reliable, inexpensive substitute for their natural gas. (slide 8)

Seventy per cent or more--some say 80 per cent--of the delivered price of coal is in transportation. If this can be stabilized, the cost of energy to the consumer can be controlled. Utility executives estimate the potential savings from coal slurry pipelines in the billions of dollars--dollars that the consumer will not have to pay on his electric bill. (slide 9)

The economics of coal slurry pipelines make these savings possible. In a recent study, conducted by Ebasco Services, it was determined that coal slurry pipelines were more economical than either high voltage transmission lines or unit trains for moving large blocks of power over long distances. (slide 10)

Railroads are subject to inflation. In a coal slurry pipeline, 75 per cent of the cost is fixed, leaving only 25 per cent subject to inflation pressures. For the railroads, practically all of their costs are subject to inflation. Not only are they "labor intensive," but their rolling stock, rails and railroads must be replaced periodically. (slide 11)

As a result, a \$7.00 per ton tariff for slurry -- based on 1974 estimates -- would

only increase to \$8.40 a ton in 20 years. (slide 12)

On the other hand, a 1974 quote of \$11.80 a ton for coal by rail would rise \$50 a ton in the same 20-year period.

The operation of a coal slurry pipeline (slide 13) is shown in this next slide. When the coal comes from the supplier, it is pulverized and mixed with liquid to form a slurry. Then it is forced by pumps through an underground pipeline to a distant terminal facility. There, giant centrifuges spin the water out of the coal, which moves to the generating station while the water is clarified and used in the cooling system.

Slurry transportation (slide 14) requires a water source, but it provides protection for the environment, it is reliable, it is capital intensive and free from the impact of inflation, and it is economical.

Water has been made into an issue in the fight to gain eminent domain for coal slurry pipelines, but coal slurry requires (slide 15) less water than other processes for converting coal into energy. A power plant, for example, requires 7 to 8 times the water needed by a coal slurry pipeline and other conversion processes, such as gasification or liquefaction, take twice as much.

So far as the environment is concerned, (slide 16) coal slurry pipelines are easily the superior method from an environmental point of view for transporting coal. They are safe. They do not cause range fires or create impact accidents. They are out of sight and, after the pipe is buried, the land is available for other uses. The pipelines are quiet, a quality some communities are beginning to appreciate as they consider the impact of round-the-clock unit train traffic. The pipelines are clean, dustless, smokeless. They are odorless with no fumes, and they do not block traffic crossings.

We believe coal in the west must move by pipeline and by rail if the nation's energy needs are to be met. Slurry pipelines cannot do the job alone nor do we

propose that. We believe that with the increased coal production that is forecast, there will be more than enough coal for everyone to carry. (slide 17) And yet the railroads want it all. They say one pipeline will ruin them, but that is a familiar refrain for railroads whenever competition threatens.

That is not a new story either. (slide 18)

A century ago, the railroads tried to block pipelines from the newly developed oil fields in Pennsylvania. Initially, they denied permission for pipelines, other than their own, to go beneath their track. The public was so outraged by this monopolistic attitude that the Pennsylvania legislature granted common carrier pipelines the right of eminent domain to acquire their rights-of-way. Nevertheless, the Columbia Conduit had to use tank wagons at one point to move its crude oil across a stretch of railroad track until the court forced the railroad to permit completion of the 100 foot gap in the pipeline.

The Association I represent also seeks the right to compete. We ask no subsidies, no favors, no handouts; just the right to do business. We support a bill that would authorize the Secretary of Interior to grant certificates of convenience and necessity to the operators of coal slurry pipelines that qualify after hearings on the specific proposal and the filing of an environmental impact statement. The holders of such certificates then would be empowered to use the right of eminent domain in the courts to acquire rights-of-way not available through negotiation, and once in operation, they would be subject to regulation by the Interstate Commerce Commission.

This is not an unusual request, especially when you consider that one mode of transportation arbitrarily refuses passage to a competing pipeline system although they routinely grant similar passage to other pipelines. It is not unusual either for the Secretary of Interior to grant the power of eminent domain. The list of carriers granted eminent domain through the Secretary of Interior starts with the railroads



back in 1875. They were allowed eminent domain not only for their rights-of-way but for resources they needed such as timber, fill and rocks on adjacent lands.

In 1902, the Secretary of Interior was authorized to acquire property under eminent domain for irrigation projects specifically to be used by private individuals, and in 1935, the Secretary was authorized to approve the use of eminent domain for acquisition by private companies for the purpose of conserving, producing, buying and selling helium.

In 1938, the same right was granted to natural gas companies.

In 1953, eminent domain was authorized to facilitate the construction of pipelines for the transportation of oil, natural gas, sulphur or minerals, and all licensees of the Federal Power Commission, since 1920, have had eminent domain to acquire land needed for reservoirs and lines that they could not get by contract or pledge.

That is the first point I want to make about the bill we support. It is soundly based on precedent and provides a rigorous examination of each individual proposal.

The second point about the bill is that it specifically leaves any rights to water exactly where they should be--with the states. The bill provides, first, "that the power of eminent domain shall not be exercised to acquire any right to use or develop water." That's in contrast with the rights the railroads enjoyed 100 years ago to take trees and rocks and dirt from adjacent property. Then the bill continues, and I quote:

"Nothing in this act shall be construed--

(1) as affecting in any way any existing law governing appropriation, use or diversion of water, or any Federal, State, or private right to water;

(2) as expanding or diminishing Federal or State jurisdiction, responsibility, or interests in water resources development or control."

The proceedings of the Fort Union Coal Conference at Bismarck last year suggest to me that you are determined to have control over the development of your own resources. No other energy development system has a clearer statement of that principal in its basic charter than I have just read to you.

"Nothing," it says, "Nothing in this Act shall be construed as affecting in any way law governing appropriation, use or diversion of water, or any Federal, State, or private right to water..."

I believe the people in the four states represented at this meeting can take care of themselves, but I get the definite feeling in Washington that somebody doesn't trust you; that the very clear statement on the sanctity of existing water laws that I just read really doesn't mean much, and that Congress must protect your water because you can't or won't.

There may be something in all this that I don't understand, but I believe I can recognize cynical self-interest when I see it. When I read in Traffic World last fall, for example, that the Burlington Northern filed for 67,000 acre feet of water a year from the Fort Peck Reservoir for a gasification plant, I wondered about the sincerity of those who show such concern in Washington for the water supply in the "arid west."

Do not misunderstand me. I do not minimize the value of water or your proper concern over its use. I respect that. After all, you are the ones who live here and I think you can make your own decisions.

As I see it, the construction of a coal slurry pipeline involves the successful negotiation of a number of hurdles. And each hurdle should be taken one at a time.

First, there must be a demand for slurried coal, and that exists, especially in the Southwest.

Then, the pipeline must have the ability to pass beneath the railroad tracks, and this, obviously, requires the right of eminent domain.

Finally, there must be a water source. And each certified builder will have to jump that hurdle for himself. The right of eminent domain will not provide it for him, but without water or some other liquid for the slurry, he can't operate. It's as simple as that, but the two issues -- eminent domain and water supply -- must be considered separately.

Once you can examine a specific and detailed plan, many questions that exist today can be resolved on a case by case basis. Some will pass; some may not, but I believe you will find coal pipelines offer attractive options that will make them worth their water.

Faced with the unit train as the only means available to carry millions of tons of coal to market, the silent, out-of-sight pipeline has a definite appeal. Regardless of how much water you allocate for energy conversion here, the demand for coal delivery elsewhere will remain, and at the present time, the unit train "is the only horse you have to ride." In an area such as this, where the transportation of agricultural commodities is of such importance, that would cause me grave concern.

History tells us that freight car shortages have plagued the American farmer since before the turn of the century. Indeed, the first case before the Interstate Commerce Commission in 1887 involved freight car shortages in the Dakota Territory. And the situation hasn't gotten much better, judging from Congressional hearings over the years.

As recently as 1973, witness after witness testified to the chronic shortage of freight cars that was only intensified by the massive Russian grain purchase that year. Commenting on the difficulties in moving agricultural commodities, Stephen Ailes, the head of the Association of American Railroads, said

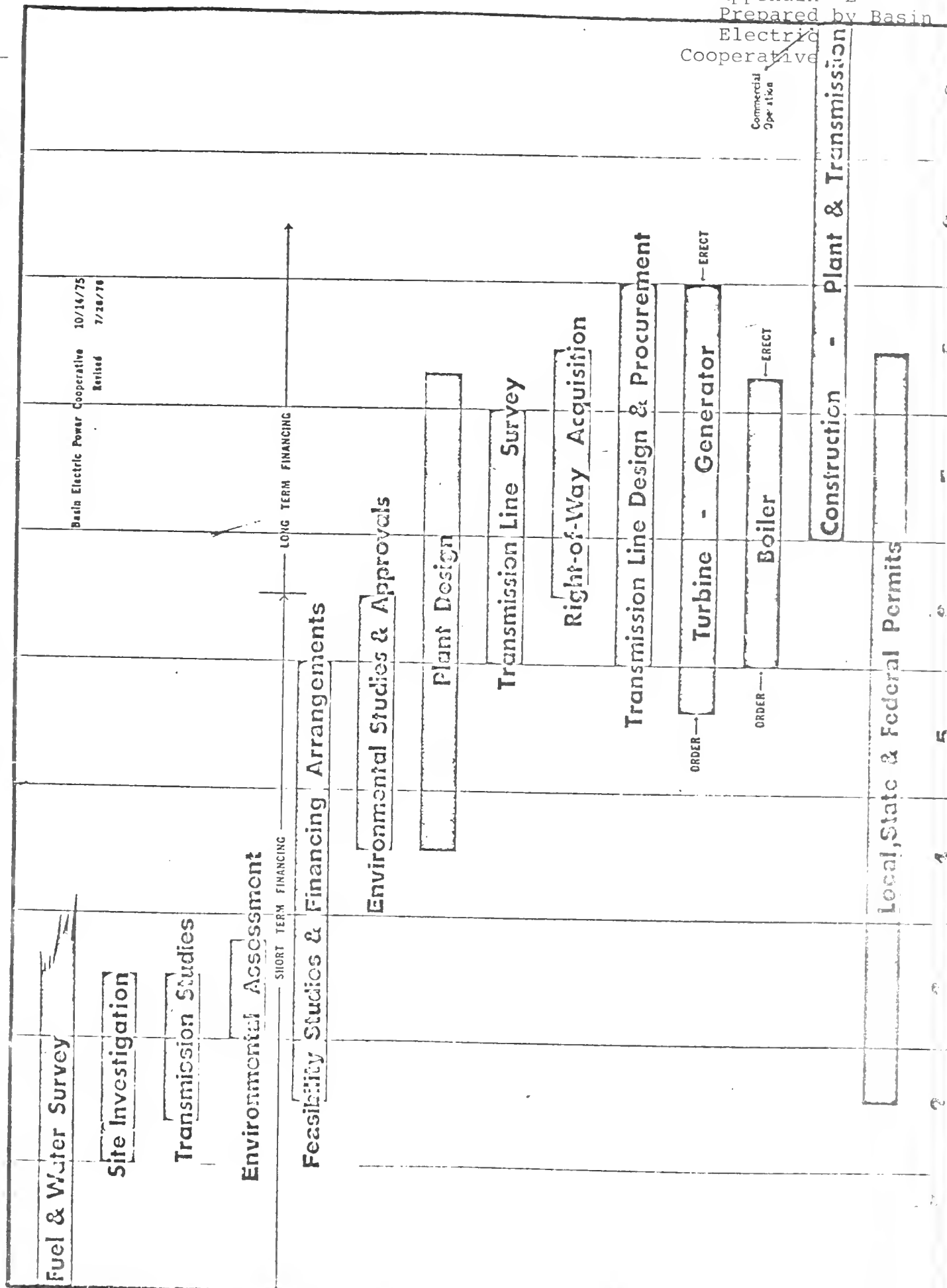
"...if the environmentalists had decided that we should be burning coal in some of these utility plants and if we had had a normal coal movement this year, you really would see a problem."

The Burlington Northern has gone on television to tell how much it is doing to increase its coal carrying capacity. During the commercial, you can see a loaded coal train race past on a single track line. And I wonder how many carloads of things you need here and how many things you have to sell elsewhere are side tracked, while coal that could be in a pipeline roars past. You should wonder also.

I am confident that we will win our fight for eminent domain and you will have coal slurry pipelines as a transportation option to consider. The only thing I can't tell you for certain is when, but it will come as soon as the American people realize that there is a limit to the efficiencies that the railroads produce by modifying a concept that is a 100 years old. The unit train was developed under pressure from the first commercial slurry pipeline and it is perhaps the last step in minimizing rail costs by reducing labor and increasing utilization. The logical next step...the ultimate extension of the unit train principle is the pipeline.

The railroads have opposed new types of transportation for years. But we know that now is the time for a broader point of view and the pipeline represents a viable alternative to the old tracked-wheel concept.

# LEAD TIMES REQUIRED - MAJOR ELECTRICAL GENERATING FACILITY



PERMITS AND APPROVALS REQUIRED  
FOR  
JOINT ANG/BASIN ELECTRIC PROJECT

ANG COAL GASIFICATION COMPANY

Agency:

Permit:

Army Corps of Engineers	Easement for Water Intake, Pipeline and Access Road  Section 10 for Water Intake
Environmental Protection Agency	New Source Perf. Review Air Quality Sig. Deterioration Review  Deep Well Disposal Permit Review
Federal Power Commission	Certificate of Public Convenience and Necessity
Federal Aeronautical Administration	Application for and Notice of Proposed Construction for Structures over Regulated Heights
Federal Communication Commission	Permit for Construction and Operation of In-Plant Radio Facility
Department of Interior, Bureau of Reclamation	Water Service Agreement
BLM (Billings, MT)	Environmental Impact Statement
North Dakota Department of Health, Environmental Engineering Division	<u>Permit to Construct</u> AP-100 - Facility Identification for Air Containment Sources AP-101 - Fuel Burning Equipment used for Indirect Heating AP-102 - Manufacturing or Processing Equipment AP-103 - Incinerators AP-109 - Gas Cleaning Equipment AP-112 - Volatile Organic Compounds Storage  <u>Permit to Operate</u> (Air Pollution Control Permit)

North Dakota Department of Health, Solid Waste Division	Solid Waste Disposal Permit
Water Supply and Pollu- tion Control Division	Deep Well Disposal Permit (NPDES Permi
	Test Well Permit (Deep Well Disposal)
	License for Radioactive Measuring Divice Operations
	Hazardous Waste Control Plan
	Wells for Temporary Water Supply (Const. Water)
	Sewage Treatment Plant
North Dakota State Highway Department	Rail Siding Crossing Permit at State Highway 200
North Dakota State Water Commission	North Dakota State Water Permit
	Appropriation of Underground Water (Wells for Const. Water)
North Dakota Secretary of State	Certificate of Authority for Foreign Corporation to Transact Business
North Dakota Unemployment Compensation Division of Employment Security Bureau	Application for Coverage by ANG Coal Gasification Company
North Dakota Workman's Compensation Bureau	Coverage by ANG Coal Gasification Company
North Dakota Public Service Commission	Plant Certificate of Site Compatibilit
	Water Pipeline Certificate of Site Compatibility for a Transmission Corridor
	Water Pipeline Transmission Facility Route ,Permit
Mercer County Board of County Commissioners	Petition for Access to County Roads
	Petition for Vacating County Road and Closing Section Lines

Mercer County Board of  
County Commissioners

Plant Site Rezoning

Conditional Use Permit

Mercer County Soil  
Conservation District

Erosion and Sediment Control Plan

Mercer County Planning  
Commission

Certificate of Zoning Compliance

BASIN ELECTRIC POWER COOPERATIVE

North Dakota State Health  
Department

Construction Permit

National Pollutant Discharge Elimina-  
tion System (NPDES) Permit

Solid Waste Disposal Permit

Permit to Operate

U. S. Environmental Pro-  
tection Agency Region  
VIII and North Dakota  
State Health Dept.

Spill Prevention Control and Counter-  
Measure Plan

U. S. Environmental Pro-  
tection Agency Region  
VIII

Pre-Construction Approval

North Dakota Water  
Commission

Approval of Water Appropriation

Mercer County Planning  
Commission and Board of  
Commissioners

Conditional Use Permit

Mercer County Planning  
Commission and Commissions  
of other Counties Crossed  
by Transmission Lines

Certificates of Zoning Compliance

USDA Rural Electrification  
Administration

Environmental Analysis

North Dakota Public Service  
Commission

Certificate of Site Compatibility for  
an Energy Conversion Facility



North Dakota Public  
Service Commission

Route Permit

Certificate of Site Compatibility  
for a Transmission Facility Corridor

Federal Aviation Admin-  
istration

Stack Construction Permit

North Dakota Highway Dept.  
and Affected Counties

Permits for Highway Crossings

PRESENTATION TO THE FORT UNION TASK FORCE ON ENERGY DEVELOPMENT, REGULATION  
AND PLANT SITING

By Duane Bye, Assistant to the Manager, Basin Electric Power Cooperative  
Rapid City, South Dakota - October 4, 1976

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I'd like to thank the members of the Task Force for this opportunity to discuss Basin Electric's experience with environmental regulations in general and plant siting and transmission routing regulations in particular. It is our conviction that such regulations can be written and administered in a way that will protect natural and human resources and still allow for the timely development of necessary energy facilities. It is to that end that my comments today are directed.

BASIN ELECTRIC POWER COOPERATIVE

For those of you unfamiliar with our organization, I'd like to explain that Basin Electric Power Cooperative is a regional wholesale power production and transmission cooperative, organized and incorporated in North Dakota in 1961 to provide low-cost power to its member rural electric cooperatives in the Missouri River Basin because the hydroelectric power from the Federal dams on the Missouri River could no longer meet their growing requirements.

These cooperatives serve the electric power needs of approximately 300,000 rural families, businesses and industries -- about one million people -- in eight states of the Missouri Basin -- North and South Dakota, Minnesota, Iowa, Nebraska, Colorado, Montana and Wyoming.

The increasing power needs of these Missouri Basin rural consumers -- growing at a rate more rapid than the national average -- are reflected in long range, ten year forecasts prepared by the local distribution cooperatives. These forecasts from the eight-state service area are combined to determine the total regional power requirement of Basin Electric's members. These forecasts form the basis for studies and plans to develop major generation and transmission

additions. Because facility planning is done in response to anticipated demands, it is crucial that projects remain on schedule to be able to provide the energy as it is needed.

The environment has been a long-standing concern of Basin Electric. In 1967 the Basin Electric membership adopted ideals and objectives to guide the Cooperative. One of those ideals states that Basin Electric believes that "The presence of a clean and healthy environment is one of the most pressing needs of our time, and it is incumbent upon the energy industry to minimize any impact it may have on the environment."

In discussing the environmental regulation of electrical generating facilities, I think it would be useful and informative to give you some background to briefly describe the major elements of the utility planning process.

#### TEN YEAR LEAD TIME FOR UTILITY PLANNING

Basin Electric's first generating unit came on line early in 1966. Planning for that project had begun about four years earlier, shortly after Basin Electric's formation in 1961. Today we are looking at the need to begin planning for a facility up to ten years before the facility will be needed, as indicated on the chart handed out to you previously. This ten-year lead time creates a number of problems for electrical utilities. It means that funds must be committed far in advance of a project's going on line, greatly increasing the risks involved. It also means that utilities will increasingly be involved in various phases of planning for two or three projects at a time.

There are a number of factors which have contributed to this lengthening of lead times. The single greatest factor, however, has been increasingly numerous federal and state regulations and the related greater construction time required for the complex environmental equipment and controls.

A number of elements enter into this ten-year time frame, as you can see on the chart. Approximately  $3\frac{1}{2}$  years are needed for construction alone. Orders for major pieces of plant equipment must be placed five to six years prior to commercial operation. These orders include expensive cancellation charges which must be paid to the manufacturer if the project is not realized. In order to provide the information needed for the environmental impact statements and applications for other permits, final plant design must begin  $6\frac{1}{2}$  years prior to commercial operation. This design must be geared to a specific site because physical characteristics at different sites will require different design features. The remaining  $3\frac{1}{2}$  years are needed for all the activities which should take place prior to beginning final plant design such as site investigations, transmission studies, impact investigations, feasibility studies, financial arrangements and, in the case of joint projects, participation agreements.

#### BASIN ELECTRIC SITING PROCESS

In looking at the chart you can see that the first steps must necessarily be the various siting procedures. Few people outside the industry are familiar with the requirements for a utility site, so it might be useful for us to briefly discuss the factors that enter into the utility siting process.

There are a number of basic elements without which a generating facility simply cannot operate. Any site must provide fuel, water, transmission, residue storage or disposal, temporary and permanent housing, and adequate transport requirements. These elements must combine in a manner that is both environmentally acceptable and financially feasible. These considerations are basic and essential whether identified by the utility alone as in the past, or under the watchful eye of various federal, state and county agencies, as is now the case.

To illustrate how these factors are brought together in the siting process, let me outline for you the actual parameters that were included in a Basin Electric siting contract signed early in 1973. These are the elements that the consultant was directed to consider in making a siting recommendation:

- capacity of the facility (as determined by load projections),
- mine-mouth or short-haul versus rail-haul sites,
- various sizing, for instance whether two 600 or three 400 MW units would be preferable,
- scheduling for the various units (which was, of course, determined by load projections),
- the consultant was directed to evaluate sites connected with existing fuel and water supply proposals as well as sites suggested by consideration of such factors as: watershed and streamflow data; ground water potentials; water right and water compact agreements; suitability of topography and geology for water storage ponds, foundations, transport facilities and storage and disposal areas; prevailing winds, temperature; and precipitation.

Once potential sites had been identified which favorably met all of the above conditions, they were to be analyzed in greater detail to determine the following:

- comparative fuel costs and quality (including transport costs, ash disposal requirements, stack cleaning costs and resulting boiler efficiencies),
- water requirements and costs under various cooling processes and assured availability at each site,
- acreage required at each site and cost,
- availability and feasibility of transport facilities,
- housing available for construction and operation work forces,

- transmission requirements associated with each site,
- environmental concerns such as air and water quality standards and protection of fish, fowl, animals and plants, and
- overall total cost.

In order to perform this detailed analysis, the consultant had to be able to supply personnel in the following areas of expertise, among others: hydrology, geology, cooling technology, engineering and design, environmental standards and regulations, environmental control technology, meteorology, and fuel technology.

When you look over the factors that are essential to a generating facility site, you can readily see that there are probably far fewer suitable sites than you might have expected. You might have noted too, that the contract included environmental considerations, although at that time only Montana among the states being considered had siting regulations.

With that background, let's talk specifically about Basin Electric's experiences in complying with environmental regulations. As I mentioned initially, my remarks are directed toward the goal of achieving a balance between environmental protection and timely provision of needed energy.

#### NEED FOR EARLY COMMITMENT TO SITE

One of our most perplexing problems is the relationship of the siting approval to the other elements in the planning process. Until major approvals and permits are received, a project operates on short-term, relatively high cost money. This means that the utility ends up being committed to millions of dollars in studies, sites, major equipment and well developed designs before permits are received. A case in point is Basin Electric's Laramie River Station in Wyoming. We had purchased sites for plant and reservoir, were committed to major equipment suppliers with expensive cancellation charges, and had gone

through or committed some twenty million dollars of such front-end costs, prior to receiving the first permit or approval.

As I've pointed out, without fuel, water and the other essential elements, there simply is no project. It is crucial that we have early commitments to fuel, water, plant site and transmission paths if the project is to proceed with site specific design in a sound, environmentally acceptable manner. Additionally, because the very costly environmental and socio-economic studies are site specific, as is the actual engineering design of the facility, it is an extremely high risk matter to initiate these studies without an approved site. Yet in spite of these facts, we presently find that because of the tremendously detailed data required, the siting approval can be sought only after millions of dollars have already been committed.

If an applicant were issued a conditional siting certificate, the utility could proceed with the various studies with an assurance that the site is secure as long as the conditions are adhered to.

#### DUPLICATION OF AUTHORITY

A second difficulty arises from the fact that considerable duplication exists between siting regulations and the regulations of other agencies. In Wyoming for instance, both the Public Service Commission and the Siting Council have jurisdiction over the location of transmission lines. Any disagreement between the two groups holds the potential for project delay. An even more perplexing situation existed for a while in North Dakota when the State Water Commission declared that siting approval was necessary before a water appropriation could be granted for our Antelope Valley Station. Unfortunately, the siting regulations required county approvals as a prior condition and the county ordinance required a water permit before a conditional use permit could be granted. Additionally, there is often duplication in such areas as air and

water quality. Such duplication could easily be relieved by making compliance with other agency regulations a condition to a siting approval. There would also be much value in efforts to coordinate siting requirements with those of the National Environmental Policy Act, so as to facilitate preparation of a single document for both purposes.

#### CHANGING REGULATIONS

Changing environmental regulations have also posed some problems. In Wyoming for instance, design for the Laramie River Station was well advanced when the Wyoming SO<sub>2</sub> limitations were changed. This meant that thousands of dollars in engineering and environmental work had to be scrapped and the project was delayed, adding to already high costs. Provisions in laws and regulations to minimize the impact on projects already far into design would do much to cut down the delays that endanger a utility's ability to meet growing demands in a timely manner.

#### MITIGATION OF SOCIO-ECONOMIC IMPACT

As you are no doubt aware, socio-economic concerns have become an increasingly major factor in the planning of electrical generation facilities -- and appropriately so. There is however a great deal of confusion on the part of nearly everyone as to where responsibilities lie and what means are available for solutions.

As we all know, a major industrial facility, once it is into operation, generates considerable public revenues. In most states, some portion of these revenues goes to the communities impacted -- but often too late. The socio-economic impact of necessary industrial growth could be much alleviated if state laws provided for public revenues from such projects to be channeled to the appropriate communities in advance of impact. With these revenues provided in a timely manner, affected



communities and industry can work together to provide maximum mitigation of socio-economic impact. This is another area where a conditional siting permit could specify mitigating measures to which a utility must adhere to keep its siting approval valid.

#### DISCREPANCIES BETWEEN REGULATIONS OF ADJOINING STATES

A potential problem that we have not yet encountered, and hope not to, is that of discrepancies between the regulations of different states. Particularly in the case of transmission lines, it is important that regulations of adjoining states be coordinated to the greatest extent possible.

#### ALTERNATIVE SITE DATA

One area that has caused us considerable concern is the amount of data required for alternate sites. Certainly we appreciate that sufficient data must be provided to adequately assess the environmental aspects of various sites. This is a requirement of NEPA and must be done whether siting regulations apply or not.

An environmental impact report for a major energy conversion facility now costs one million dollars or more to produce. In addition, the engineering for the proposed project must be well developed as a prerequisite to the impact analysis. In order for any site to be a real alternative, fuel and water sources must be assured. If one is to accept the fact that a mine-mouth facility with its long-term savings in operating costs is in the best interests of the consumer, then it follows that two coal contracts would have to be negotiated, potentially two water permits or water rights would have to be obtained, and two communities or sets of communities would have to be analyzed from a socio-economic standpoint. These are but a few of the many problems associated with a requirement to do a full analysis on both a preferred and alternate site. It would certainly add to

the cost ultimately borne by the consumer and in all probability result in even longer delays in the development of energy facilities.

#### TRANSMISSION LINE ROUTING

Another rather controversial area these days is the location of transmission lines. A lot of people are suggesting that they be located exclusively on section lines, quarter lines, or along railroads or other existing facilities. I am not convinced that this type of restriction is in the best interest of either the landowner or the consumer.

Ever since Basin Electric began building major transmission facilities, we have been using a system called constraint mapping.

Constraint mapping means that we identify land use and physical and socio-economic characteristics of a broad area between the two terminal locations which a proposed project will connect.

For example, we are currently working on a project which would connect our proposed Antelope Valley Station in Mercer County, North Dakota, to a substation near Huron, South Dakota. We began by mapping crop land in an area covering nearly 30,000 square miles by using Landsat imagery. This information becomes a basic part of the constraint map. The map will ultimately include locations of ground water, irrigation projects proposed and existing, parks, proposed parks, wildlife areas, historic and archaeological sites, airports and airstrips and a host of other items which may not be compatible with transmission lines.

With this kind of tool we are able to locate these facilities to a large extent on the non-tilled areas even in the farm country of central North and South Dakota. Where there is no reasonable alternative but to cross an area that either is irrigated or is likely to be, a property line location would most likely be selected.

This information is put together through contacts with virtually every agency of state, Federal and local government having an interest in land use in the study area.

I believe that rules that encourage the use of this type of approach are in the best interests of the most people.

FACTS SHEET ON LIGNITE GASIFICATION PILOT PLANT

RAPID CITY, SOUTH DAKOTA

APPENDIX "H"  
Prepared by  
Gasification Plant  
Staff

PROCESS: Conoco Coal Development Company's CO<sub>2</sub> Acceptor Process

SPONSOR: Office of Coal Research, United States Department of Interior  
(Provided total funds for initial construction of main pilot plant.)

OPERATING CO-SPONSORS: Office of Coal Research - - 2/3 of funds  
American Gas Association - 1/3 of funds

COST OF CONSTRUCTION: 9.3 million dollars for gasification section in 1971  
1.6 million dollars for methanation section in 1975

ESTIMATED COST OF OPERATION: 5.5 million per year

LIGNITE USAGE: 36 tons/day feed; 80-90 tons/day raw.

DOLomite USAGE: 7 tons/day sized stone; 20 tons/day raw.

SYNTHESIS GAS PRODUCTION: 2,000,000 standard cubic feet per day of 375 BTU/SCF gas.

SITE AND LOCATION: 10 acre site on South Dakota Highway 79. Land contributed by  
Western South Dakota Development Corporation.

EMPLOYMENT: Approximately 130.

PRIME CONTRACTOR: Conoco Coal Development Company  
Pittsburgh, Pennsylvania, under contract to the United States  
Energy Research and Development Administration

SUBCONTRACTOR: Stearns-Roger Incorporated, Denver, Colorado

COMMERCIAL PLANT BASED ON CONOCO COAL DEVELOPMENT'S CO<sub>2</sub> ACCEPTOR PROCESS

LIGNITE USAGE: 30,000 tons/day as mined or 430 railroad cars (70 ton cars).

PIPE LINE GAS: 250,000,000 standard cubic feet of gas per day.

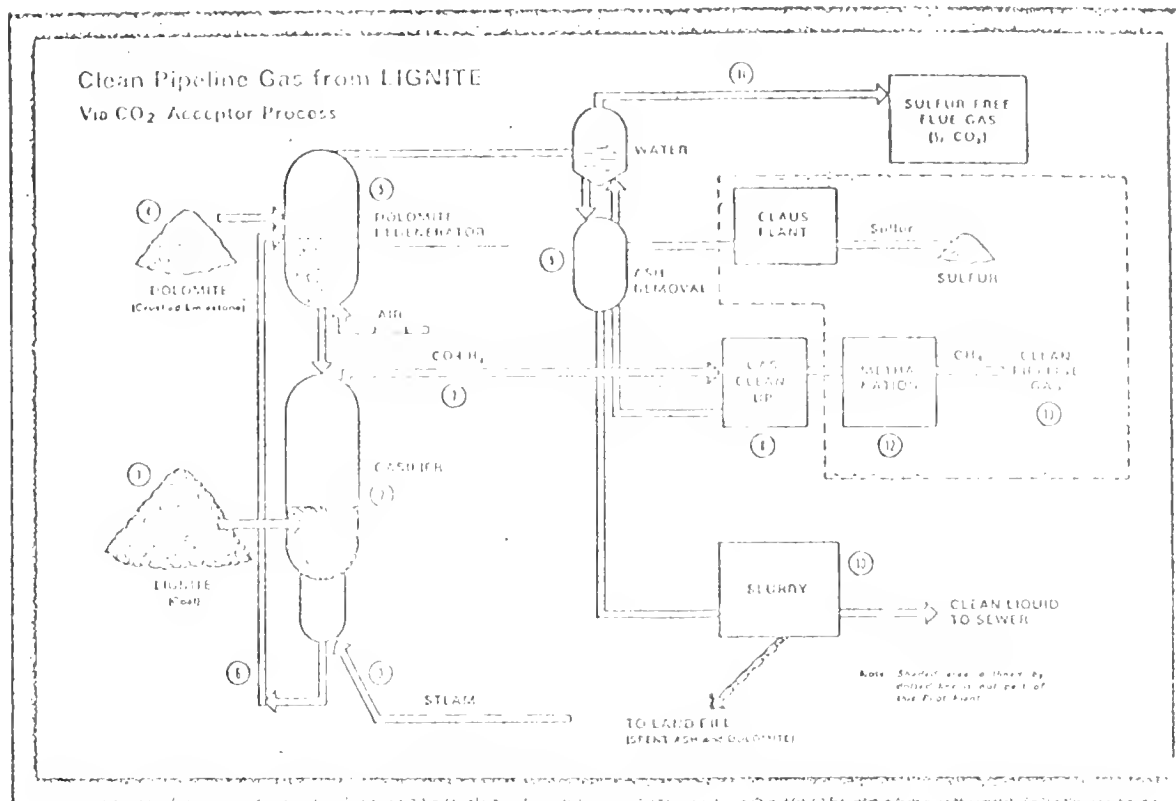
LIGNITE RESERVES REQUIRED: 350 million tons over 35 year period.

ESTIMATED EMPLOYMENT: 160 operating personnel for the gasification section.  
About 800 people total employment.

ESTIMATED PLANT COST: 500 million to 1 billion dollars.

WATER USAGE; 7.5 acre feet per day or 2.5 million gallons/day.

TGT:bfm  
6-24-75



### CONSOL'S GASIFICATION PROCESS--CO<sub>2</sub> ACCEPTOR PROCESS

The coal gasification process developed by Consolidation Coal Company is a significant technological advance in solids-to-gas conversion--both in the equipment and the method used to apply and sustain heat to the reactors to produce synthetic gas.

In Consol's CO<sub>2</sub> Acceptor Process, lignite (coal) (1) is ground, dried and fed into a gasifier (2) where, under pressure of 150 to 300 lbs. per sq. inch, it is heated in the presence of steam (3) to a temperature of 1500°F.

Dolomite (crushed limestone) (4), preheated to 1900°F in the regenerator (5) is fed into the top of the gasifier. The limestone particles filter down through the gasifier (2) furnishing the heat because of its high temperature and by a unique chemical reaction, in which the dolomite absorbs carbon dioxide.

The spent dolomite and carbon residue are circulated (6) to the regenerator (5) where the dolomite is regenerated, using heat from the burning of the carbon.

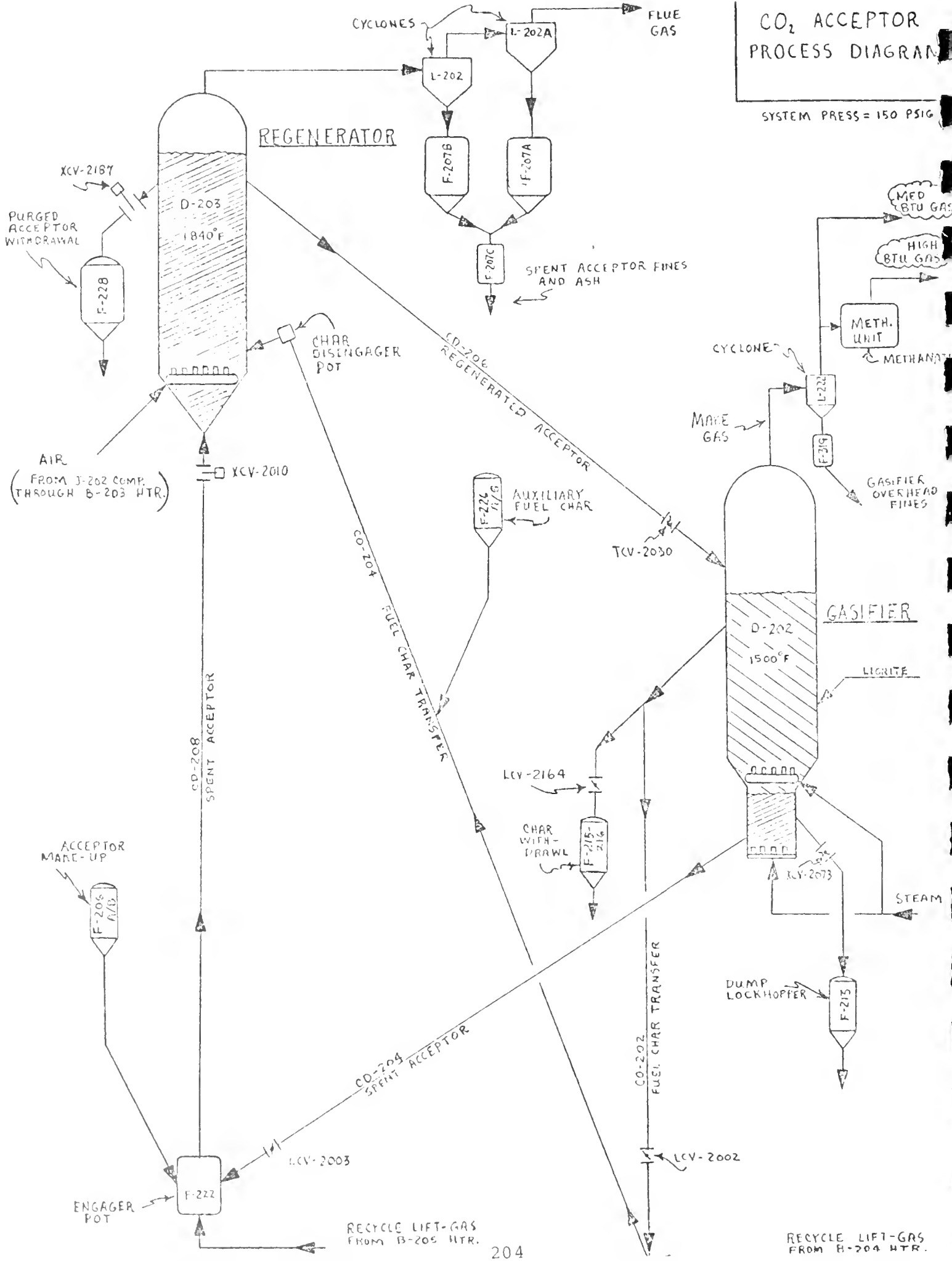
The gases (7) released by heat and chemical reaction between steam and coal in the gasifier represent the final product containing all the ingredients needed to make pipeline gas.

The gases are cooled and cleaned (8). All sulfur and ash (9), liquids and solids (10) are removed so there is no air (11) or water pollution.

Only methanation (12) is then required as the final step in producing pipeline quality gas (13).

# CO<sub>2</sub> ACCEPTOR PROCESS DIAGRAM

SYSTEM PRESS = 150 PSIG



FORT UNION COAL REGIONAL TASK FORCE

Energy Development, Regulation and Plant Siting  
Minutes of May 26, 1976  
Ramada Inn, Casper, Wyoming

The meeting was called to order at 9:00 a.m. by Acting Moderator Representative Dean Prosser, Wyoming. Committee members introduced themselves with the following members present: South Dakota - Senator James B. Dunn, Senator Philip Testerman, Representative Harold Millett, Mr. John Culberson, substituting for Mr. James VanLoan, and Mr. Art Wilner; Montana - Senator Frank Dunkle, Senator C. R. Thiessen, Representative L. E. (Gene) Wood and Ms. Sharon M. Solomon; North Dakota - Representative Ralph M. Winge and Dr. Charles Metzger; Wyoming - Representative Dean Prosser, Representative Warren Morton, Dr. Gerald Meyer and Dr. Blaine Dinger. Also present were Ms. Sheila Miedema, Project Coordinator of the North Dakota Legislative Council; Mr. Steve Merrick, South Dakota Legislative Research Council; Mr. Ralph E. Thomas, Director, Wyoming Legislative Service Office and Ms. Kim Allen, Recording Secretary, Wyoming Legislative Service Office.

Committee members absent were: Representative Earl S. Strinden, Mr. Melvin White Eagle, Dr. John Brophy, North Dakota; and Mr. Jack Larson, Wyoming.

Representative Prosser welcomed the group and introduced Ms. Sheila Miedema, Project Coordinator, who gave a brief explanation of the purpose of the Task Force meeting. Ms. Miedema briefed the group as to how the expenses would be paid. There are seven Task Forces in a four state area, funded through the National Science Foundation. Members will be reimbursed from the grant proceeds. Expenses shall be paid in accordance with the federal rate which is \$33 a day per diem (for meeting day only), 15¢ per car mile or actual commercial airfare.

Ms. Miedema advised the group that as Project Coordinator she works for all four states but all administrative details, such as minutes, mailings and meeting notices, would be handled through the North Dakota Legislative Council.

## Rules and Procedures

Representative Prosser announced that a quorum would be eleven members if there were no objections. There being none it was so ordered.

It was decided by the group that substitutes for absentees would be allowed to attend meetings, however, one person cannot vote two votes.

## Election of Officers

Senator Dunkle nominated Representative Prosser, Wyoming, as Chairman. A motion was made by Senator Thiessen that nominations cease and the Secretary cast a unanimous ballot for Representative Prosser. The motion carried.

Representative Morton, Wyoming, nominated Ms. Kim Allen as permanent secretary. There being no further nominations a unanimous ballot was cast.

## Feasible Goals

- A. Proposed Common Legislation.
- B. Continued Research.
- C. Proposed Executive Action.
- D. Recommend Rules or Changes in Rules  
Regulating Interstate Agreements.

## Topics of Discussion

- a. Four-State Energy Policy - Chairman Prosser questioned the group as to whether the development of a four state energy policy would be feasible or desirable.

Members agreed that the four states must recognize public concern regarding energy development and be made aware of the potential problems because the problems are too complex to contend with on a rush basis.

A major problem to all states in completing energy facilities is the time involved in granting or rejecting a permit.

One definite problem which was brought up was the fact that every state starts from a different point - one particular state may be looking toward energy development whereas other states may want to reject development.

Each state is requested to draft an analysis of their siting acts for comparison and future discussion.



- b. Interstate Regulations and Agreements - This is an area which needs investigation but there is very little that a group such as this can do. One example of this is when development occurs in one state but the people cause impact to another.

The problem is shared by everyone, but each state has their own individual laws that must be enforced. Members felt that since every states' economy is different the states cannot be bound together.

- c. Exchange of Information - The exchange of information is very important because no one knows what is in the future and what the plans of other states are.

The biggest concern is not so much from any single plant but rather the cumulative effect of many plants and the possible impact they will have.

Following this discussion, Senator Thiessen moved to strike item "b" (Interstate Regulations and Agreements) as no definite goal could be accomplished. The motion was seconded by Representative Millett and passed with one dissenting vote.

- d. Transmission Line Corridors - Senator Thiessen felt it was very important for the four states to work together in this area because common carrier lines are needed and when one line is built it can accommodate the needs of other suppliers.

- e. Siting on or Near Indian-Owned Properties - The members felt the federal government had more control than the states on Indian land and no committee actions could be implemented at this point in time.

All possible topics of concern were discussed and the members decided to hold three more meetings, the first one dealing with Plant Siting, the second with Energy Development and a final report will be submitted and discussed at the third meeting.

Each state was advised that if they would like to invite a particular individual with expertise in the area of energy development or plant siting to attend, please contact Ms. Miedema, Project Coordinator, as all invitations must go through her.

Mr. Art Wilner, South Dakota, made a motion that the next meeting be in Billings, Montana, August 2,3, 1976, and be prepared to discuss both topics. Motion was seconded and passed.

Information Requested

Each state is requested to prepare an analysis of their Plant Siting Acts for discussion.

Dr. Blaine Dinger made a motion to adjourn. Motion seconded and passed at 2:45 p.m.

PORT UNION REGIONAL TASK FORCES  
Energy Development and Plant Siting  
Minutes of August 2-3, 1976  
Ramada Inn - Billings, Montana

The meeting was called to order at 9:15 a.m. by Chairman Prosser. The roll was called with the following members present:

South Dakota

Senator James B. Dunn  
Representative Lars Herseth  
    substituting for Senator  
    Philip Testerman  
Representative Harold Millett  
Mr. James VanLoan  
Mr. Ed McGuire  
    substituting for Mr. Art Wilner

Montana

Senator C. R. Thiessen  
Representative E. W. Dassinger  
Representative L. E. "Gene" Wood  
Ms. Sharon Solomon

North Dakota

Representative Ralph M. Winge  
Mr. Melvin White Eagle  
Dr. John Brophy  
Mr. Dwight Connor  
    substituting for Dr. Charles Metzger

Wyoming

Representative Dean Prosser  
Dr. Gerald Meyer  
Dr. Blaine Dinger

Others

Ms. Sheila Miedema  
Project Coordinator  
Ms. Kim Allen  
Recording Secretary  
Mr. Tom Tudor, North Dakota  
Mr. Doug Meyer, North Dakota  
Mr. Bill Johnson, South Dakota  
Mr. Art Steichen, South Dakota  
Mr. Gary Wicks, Montana  
Mr. Mike Meloy, Montana  
Mr. Dick Steinhauser, South Dakota

Members Absent:

South Dakota

Senator Philip Testerman  
Mr. Art Wilner

Montana

Senator Frank Dunkle

North Dakota

Representative Earl S. Strinden  
Dr. Charles Metzger

Wyoming

Representative Warren Morton  
Mr. Jack Larson

There was one correction to the minutes from the previous meeting: Representative Dassinger's name was omitted as being present. A motion was made by Representative Millett and seconded by Dr. Meyer to approve the minutes as corrected. The motion carried.

Mr. Dick Steinhauser of Yellowstone Valley Electric Cooperative Incorporated presented a film entitled We, the People Plan prepared by the Missouri Basin Power Plant. The film demonstrated the problems which were encountered in siting the Missouri Basin Power Plant, the objectives involved and the progress that has already been made.

Mr. Doug Meyer, Bismarck, North Dakota, attended the meeting to explain his duties as director of the Indian Lignite Manpower Project. Mr. Meyer explained that the project was geared to expand the education of Indians who are presently living on reservations so that they may have the chance at

good jobs and pass their knowledge and education on to other tribe members.

The project began with a survey regarding education, job classification and employment. The data from this survey will be compiled and interested individuals will be trained in the lignite industry in the areas of management, unions and education. Residents who have been trained and are working in the lignite industry will take their training back to the reservations to help others learn a trade.

Mr. Meyer agreed to send the compilation of surveys to Miss Miedema who will then distribute them to the Task Force members.

### Plant Siting Acts

Mr. Tom Tudor, North Dakota, distributed the Rules and Regulations of the North Dakota Public Service Commission which govern the Energy Conversion and Transmission Facilities.

Mr. Tudor explained in detail the procedures for public hearings, advisory committees and the time allotment for applications. The utility reporting requirements were read and each type of plan explained thoroughly. Mr. Tudor described the procedure for standard certificates of sites and corridors.

Mr. Tudor answered questions pertaining to the laws in North Dakota and added that a public hearing was needed to change any rules and regulations.

Dr. Blaine Dinger, Wyoming, distributed copies of the Industrial Siting Permit Process in Wyoming. The requirements for any energy generating and conversion plant were explained in detail. Dr. Dinger added that a seven member Industrial Siting Council with membership appointed by the Governor makes up the decision making body. Application for permits to construct a plant must detail all phases of a proposed activity and an initial fee is required to cover the cost of processing the application.

To date the Wyoming Siting Administration has processed two applications for major facilities: the Pacific Power and Light Company - Idaho Power Company application for the Jim Bridger Unit No. 4 and the application for units 1-3 of the Laramie River Station by Basin Electric Power Cooperative.

Dr. Dinger felt the following points were the best in the entire siting permit process:

- A. Very good comprehensive information requirements;
- B. Allows for limited amount of public participation;
- C. Provides clearly the definition of the applicant;
- D. Legislature has definite input.

Dr. Dinger stated the following as definite problem areas:

- A. Initial review period of 40-60 days is too short;
- B. No provisions for a preconference hearing for clearly defining issues;
- C. Overlapping jurisdiction of various agencies;
- D. Does not specifically provide that mining operations are not industrial facilities;
- E. Agency cannot reject an application when filed;
- F. Uses a citizens' council as the decision making board.

Mr. Mike Meloy, Montana, presented Montana's siting regulations and outlined the following problems:

- A. Public has no input until the hearing is over;
- B. Lack of coordination between the state and federal government in siting matters
- C. Doesn't address the problem of interstate coordination in the areas around a proposed plant;
- D. Short term approach is not beneficial to citizens of the state.

Mr. Meloy felt the siting act in Montana is not working because the act is putting the state of Montana and the people in a very reactive position and offered the following as possible means of avoiding this situation:

- A. Begin process earlier;
- B. Allow for attitudinal change in utility far in advance;
- C. Allow for public input for a joint decision;
- D. State and Regulatory Boards should be placed within the best capabilities of both sides rather than both acting in advisory positions.

#### Energy Development Presentations

Mr. Gary Wicks, Montana, gave a brief explanation of energy development being conducted at the present time.

Mr. Wicks felt that coal is going to be the main thrust in solving the nation's energy problem. However, there are some definite problems that need to be worked out. Some problems that Montana is facing in the area of energy development are:

- A. Significant demands on land base;
- B. Strip mining being the only type of mining;
- C. Population - every person in the region would be affected.

Mr. Wicks felt that the nation needs a national energy policy and each state should begin planning and evaluating what their particular region and the surrounding states would recommend for the area in the future.

Chairman Prosser, Wyoming, felt that Wyoming has an energy oriented economy and during the 1975 Legislative Session, the Wyoming Legislature met head on the industrial development and land use planning needs for the state. Chairman Prosser felt that a state energy policy would be beneficial to the state but a national energy policy should be established first. The most important thing right now is to protect our own environment and wait and see what happens with the national energy needs and national legislation.

Mr. Dwight Connor, reported on energy policies and development in North Dakota. All plants in North Dakota have water permits and by 1985, there is an expected increase in water use of about 5 1/2 times that of the present.

Mr. James VanLoan, South Dakota, reported on energy productivity in South Dakota, stating that most energy produced is hydroelectricity with the state consuming approximately 40% of the hydroelectricity produced. Water management is crucial to the state since there is a severe ground water problem.

Representative Hillett added that an energy policy would best serve the needs of the people and a regional policy could always be monitored for needed change.

Chairman Prosser asked everyone to be considering possible discussion topics and dates for the next meeting and a decision would be made later.

The Task Force recessed until 8:45 a.m., August 3, 1976.

The meeting reconvened Tuesday, August 3, 1976, at 9:00 a.m.

#### Next Meeting

Following discussion the next meeting was set for Monday, October 4, 1976, at Rapid City, South Dakota. Representatives from South Dakota will make the final arrangements and contact Ms. Miedema as to where the meeting will be held.

Chairman Prosser asked if anyone had any suggestions or preferences as to who should be invited to speak at the next meeting.

It was agreed that each state would invite one representative from a utility company in their particular area to serve on a panel discussion at this meeting.

Ms. Miedema asked to be advised of the representatives invited so that she may set up the agenda accordingly.

Following the panel discussion at the next meeting Ms. Miedema will submit the final report at which time the Committee can add amendments, corrections or make any other needed changes.

### Resolution

A resolution addressed to all Task Forces from the Common Data Element and Information Exchange Task Force was read asking that each task force develop its own definitions for their particular area of study and forward them to the Common Data Element and Exchange Task Force.

Senator Thiessen made a motion that a Subcommittee be appointed to define specific terms and words in the energy field and submit these definitions at the next meeting for full Committee approval. The motion was seconded by Dr. Meyer and passed without dissent.

Chairman Prosser announced that the following members would be on the Subcommittee to define energy related terms. Dr. Gerald Meyer, Chairman, Wyoming; Dr. John Brophy, North Dakota; Ms. Sharon Solomon, Montana and Mr. James VanLoan, South Dakota.

### Continuation of Task Force

Chairman Prosser asked the Task Force members what their feeling was toward continuing with the Task Force at the expense of each individual state.

Dr. Brophy felt the Task Force should continue to meet to keep up on the other states' problems and progress in the area of energy and siting.

Chairman Prosser suggested that each state discuss this idea with their Legislative Service Offices' and perhaps plan one meeting a year.

Ms. Miedema offered to compile an average meeting cost and



send to the members so they could submit this amount to their Legislative Service Offices' as the actual cost of each meeting.

Ms. Miedema also advised that there would be no money available through the National Science Foundation for travel expenses but perhaps money would be available for staff funding and she would be glad to see if another grant would be feasible for this purpose.

Representative Winge made a motion that Ms. Miedema apply for an additional grant from the National Science Foundation. The motion was seconded by Dr. Meyer and passed without dissent.

#### Presentation of ERDA

In the absence of Mr. Robert Kelly of the Energy Research and Development Administration, Dr. Gerald Meyer, Wyoming gave a presentation relative to the National Energy Development Policy.

Dr. Meyer explained briefly the leadership of ERDA (Energy Research and Development Administration) and the six programs which comprise the ERDA organization.

Dr. Meyer further explained the background policies listing the six areas which ERDA considers in addressing the supply and demand of the nations energy problems:

1. Private sector;
2. Conservation techniques;
3. Federal programs and assistance;
4. Technicalities dealing with social economics;
5. Presidential budget;
6. Planning.

#### Presentation by Mr. Jack Horton

Mr. Jack Horton, Under Secretary of the Department of Interior, gave a presentation relative to federal leasing of coal lands.

Mr. Horton explained the preferential requirement, advising of commercial quantities and the cost of compliance. Mr. Horton went into detail on federal reclamation standards and explained the way a decision is reached by the Department of Interior.

The question arose whether the price of coal would affect

bids.

Mr. Horton answered that it would because coal will not be negotiated by price but by competitive bidding on the fair market value. Mr. Horton very definitely feels that coal production will double even if no more land is leased because of the amount bid on Indian lands.

Due to a limited time schedule Mr. Horton concluded his presentation by saying that an energy policy on a regional basis would be more beneficial to the individual states than one within state boundaries.

There being no further business the meeting was adjourned at 11:00 a.m.

FORT UNION REGIONAL TASK FORCES  
Energy Development and Plant Siting  
Minutes of October 4, 1976  
Howard Johnson's - Rapid City, South Dakota

The meeting was called to order by Chairman Prosser at 9:00 a.m. with the following members present:

South Dakota

Senator James B. Dunn  
Representative Harold Millett  
Mr. Tim Payne substituting  
for Mr. James VanLoan  
Mr. Ed McQuire substituting  
for Mr. Art Wilner

Montana

Senator Frank Dunkle  
Representative E. N.  
Dassinger  
Representative L. E. (Gene)  
Wood

North Dakota

Representative Ralph M. Winge  
Mr. Chaske Wicks substituting  
for Mr. Melvin White Eagle  
Dr. John Brophy

Wyoming

Representative Dean Prosser  
Dr. Gerald Meyer  
Dr. Blaine E. Dinger

Others

Ms. Sheila Miedema, Project Coordinator, Bismarck,  
North Dakota  
Ms. Kim Allen, Recording Secretary, Cheyenne,  
Wyoming  
Mr. W. Pat Jennings, Guest Speaker, Department  
of the Interior, Washington, D.C.  
Mr. Doug Meyers, North Dakota  
Mr. Duane Bye, Basin Electric Power Cooperative,  
South Dakota  
Mr. Robert Moench, Pacific Power and Light Company,  
Wyoming  
Mr. Gary Reed, Pacific Power and Light Company,  
Wyoming  
Mrs. Dean Prosser, Cheyenne, Wyoming;  
Mr. John Ross, Montana Power and Light Company,

Montana

Mr. Bill Johnson, South Dakota  
Mr. Mark Steichen, South Dakota  
Ms. Robin Carpenter, South Dakota

Members absent:

South Dakota

Senator Philip Testerman

Montana

Senator C. R. Thiessen  
Ms. Sharon Solomon

North Dakota

Representative Earl S. Strinden  
Dr. Charles Metzger

Wyoming

Representative Warren A. Morton  
Mr. Jack Larson

Chairman Prosser announced that the meeting would be adjourned by 3:00 p.m. in order to meet airline schedules and anyone wishing to tour the gasification plant in Rapid City could do so this afternoon rather than holding over for an additional day.

Consideration of Minutes

Dr. Dinger had previously submitted several corrections to the minutes of the August 2-3, 1976, meeting of the Energy Development and Plant Siting Task Force. The following corrections were read by Chairman Prosser:

Page 4, under the category of good points of the Wyoming Siting Process:

Item B. should read to the effect that the Wyoming Siting Act allows for a maximum of public participation throughout a permit proceeding, although such participation is limited by the 40-60 day initial review period.

Item C. should state that the process provides a clearly defined procedural process for an applicant.

Item D. should read to the effect that the legislation is working, as evidenced by accomplishments in the Wheatland,

Wyoming area -- site of the Laramie River Station.

Under the category of problem areas:

Item D. should read to the effect that mining operations which may singly, or in combination with other operations, pose substantial impact problems of a social and economic nature are not specifically defined as industrial facilities for purposes of the Siting Act.

Item F. should express that the citizens comprising the Industrial Siting Council are poorly compensated for their services. Dr. Dinger stated that he did not mean to imply that he disapproved of citizen councils, for he does not. In fact he believes they function rather well, and could do so to an even greater extent if the membership were properly compensated for time away from their respective forms of employment.

Ms. Miedema added one name correction; Mr. Mark Steichen was listed as Mr. Art Steichen.

There being no further corrections to the previous minutes, Representative Winge made a motion to accept the minutes as corrected. The motion was seconded by Dr. Meyer and passed without dissent.

#### Presentation by Mr. Doug Meyers

Mr. Doug Meyers, Bismarck, North Dakota, reported on his progress relative to Indian employment in the lignite industries.

At the previous Task Force meeting, Mr. Meyers agreed to distribute to all Task Force members the survey results of the study being conducted regarding the education of Indians living on reservations. However, Mr. Meyers apologized for the delay and explained that as soon as the results are available he will submit them to Ms. Miedema who will distribute them accordingly.

A preliminary report of the Indian Lignite Manpower Project was distributed to members by Mr. Meyers, listing a summary of the studies and results conducted in the survey.

Mr. Meyer reviewed each section of the report carefully explaining that the program is to begin approximately December 1, 1977 for the course of a year and is to be funded by a federal grant.

Representative Winge questioned whether the survey was sent to any tribes outside of North Dakota, and particularly the Cheyenne Tribe of Montana.

Mr. Meyers responded that they had in fact tried to conduct the survey in Montana for the Cheyenne Tribe but they were reluctant to complete it because of the election. The Indians felt this could cause political problems.

#### Presentation and Film by Mr. W. Pat Jennings

Mr. Pat Jennings of the Slurry Transport Association in Washington, D.C. gave a presentation regarding slurry pipeline activities in the four-state area. Mr. Jennings then gave a film presentation on the Black Mesa Pipeline in Arizona. The film illustrated the work required, the supply and demand needed for a pipeline to be completed and the process showing exactly how a slurry pipeline works.

He went on to explain that at the present time the railroad is the only method of transporting coal to its destination. This creates a monopoly which the Slurry Association hopes to eliminate.

It is the railroad companies who are making it impossible for the building of coal slurry pipelines at the present time. They own the railroad right-of-ways and are refusing to sell rights-of-way across them to the pipeline companies. So for this reason, the Slurry Association has asked for the right of eminent domain at the state and federal level in order for these monopolies to be broken.

One major point the Slurry Association is arguing is that in a slurry, fuel is transported through the pipeline by electrical power that has been generated by domestic coal whereas railroads will be using imported oil to transport

fuel.

He carefully explained that the water rights issue in the slurry bill has been left completely up to the individual states. The only thing the Slurry Association is asking for at the federal level is the right of eminent domain. It is clearly stated in the bill that the power of eminent domain will not be exercised in the use or development of water.

The slurry pipelines are the least users of water and its the most environmentally desirable method of transporting coal that has ever been used.

The Slurry Association feels they are definitely going to win the issue because it is an innovative system and you can't hold back progress.

Presentation by Basin Electric Power Cooperative Representative

Mr. Duane Bye, Assistant to the Manager, Basin Electric Power Cooperative gave a brief presentation on Basin Electric's experience with environmental regulations with particular regard to plant siting and transmission routing regulations.

Presentation by Pacific Power and Light Company Representative

Mr. Robert Moench, Vice President of Pacific Power and Light Company began his presentation with a brief history of the development of the power plants in Wyoming. The following plants are presently operated by Pacific Power and Light:

Dave Johnson, Glenrock, Wyoming  
Jim Bridger, Rock Springs, Wyoming  
Wyodak, Gillette, Wyoming

Mr. Moench added that the Pacific Power and Light Company is presently looking at partial ownership of a new generating facility which is to be placed on line somewhere in the time span of 1982-1983.

Representative Dassinger questioned Mr. Moench regarding Pacific Power and Light's opinion on nuclear plants in the western states.

Mr. Moench answered that he personally cannot foresee that a

nuclear plant will ever be feasible for the states of Wyoming, Montana, South Dakota or North Dakota. However, Colorado will definitely have a nuclear plant in the near future.

Mr. Moench went on to say that even though Pacific Power and Light keeps Wyoming State Government well informed of every detail they are involved in, they seem to be getting an adversary relationship with the people in state government.

Because of hearing procedures and use of advisory councils, actual decisions concerning plant development are long delayed. Occasionally new regulations are imposed after initial development and plans have been made. This type of situation is not good because once a decision is made it is very expensive to change developmental planning and makes cost projections and planning virtually impossible.

Mr. Moench concluded his presentation by adding that Wyoming has a fine Governor, Legislature and Citizens Council who understand the problems they have and because they understand they try to come up with workable and feasible solutions to these problems.

Presentation by Montana Power and Light Company Representative

Mr. John Ross, representing Montana Power and Light Company began by stating the complications of building a power plant in Montana. He briefly reviewed Montana's siting act in order to familiarize the members with perspectives and possible solutions to the problems Montana is encountering.

Mr. Ross felt that the initial proceedings last too long and there are too many delays before a project is actually started. As a result of these delays, the cost of the project has doubled with the consumers bearing the increased cost.

In order to minimize or avoid these delays the siting act could be revised to reduce the time span and there is a very definite need for more state and federal cooperation.

According to Mr. Ross, the role conducted by state agencies could be completed within a two-year period at which time their presentation and conclusions could be submitted.

Public hearings often become too lengthy and technical and the public hearings could be divided into two types; a



legislative hearing, which would allow for public input and evidence; and a technical hearing where cross examinations could take place. With these two types of hearings, the public can speak more for themselves and reflect some of the different positions and a complete analysis could be taken.

Mr. Ross personally feels that the siting process could be more feasible if it were divided into the following three steps:

- A) Site inventory concept;
- B) Focus on the issue;
- C) How the project can best be completed.

Mr. Ross stated there are many different views regarding coal energy and development within the state. Some people refuse to foresee any type of coal development in the state. Another group is opposed to having coal development so extensive that it will develop too rapidly. A third group believes that nothing can stop progress and there will be coal generating plants in Montana and are willing to give their views and ideas regarding coal development.

Senator Dunkle agreed that the people in Montana do need to change their way of thinking and attitudes toward coal development and perhaps should look at Wyoming's siting law for a better approach. He felt the entire attitude of the public and the state agencies in Wyoming seem to be more congenial than in Montana.

Mr. Ross concluded his presentation by stating that they are open to any suggestions that could better handle their problem situations.

#### Discussion of Final Report

Ms. Miedema distributed rough draft copies of the final report to members only for their corrections and amendments. She informed the group that copies of the final report would be sent to the National Science Foundation and Task Force members. Additional copies would be available through the various Legislative Service Agencies.

There were several major changes mentioned by members of the group to the rough draft copy. These changes were recorded by Ms. Miedema who will submit a corrected version of the report for final approval.

Besides the changes mentioned, Chairman Prosser felt a

detailed summary of the final meeting should be included in the report, as well as a complete summarization of each set of minutes and complete rundown of each state's siting act.

The main objection to the rough draft was the information given at the initial meeting constituted nearly all of the information stated in the report and this initial information was presented as fact which wasn't always the case.

Dr. Brophy suggested that Ms. Miedema summarize each set of minutes to include each individual's feelings relating to each discussion.

It was the general agreement that the minutes should be included in the report and asked if Ms. Miedema could summarize the minutes and mail her summarization to a representative from each state for final approval.

Ms. Miedema informed the group that since everyone had a copy of every set of minutes they could summarize the minutes themselves and submit their summarizations to her.

The following members were appointed to summarize the minutes and submit them to Ms. Miedema.

Senator James E. Dunn, South Dakota  
Senator Frank Dunkle, Montana  
Dr. Charles Metzger, North Dakota  
Dr. Blain Dinger, Wyoming

Ms. Miedema asked that all summaries and any changes or amendments to the rough draft be submitted to her by October 25, 1976.

Ms. Miedema added that the National Science Foundation will complete a more concise report containing information from all the Task Forces, but she was not sure what type of information it would contain or when it would be available.

#### Continuation of The Task Force

Ms. Miedema advised the group that at the last meeting of the Reclamation and Land Use Task Force a motion was made and seconded that all seven Task Forces meet in Bismarck, North Dakota in November to give a presentation on the highlights of their meetings and their accomplishments.

Discussion followed regarding this final meeting and a motion was made by Representative Millett for all Task

Forces to meet in Bismarck, North Dakota on November 29-30, 1976, for a presentation of accomplishments. The motion was seconded by Senator Dunkle and passed unanimously.

It was the general agreement that Chairman Prosser would be in charge of presenting the program but would notify various members of the Task Force to assist him with the presentation.

#### Subcommittee Report

Chairman Prosser called on the Subcommittee to report on their recommendations of definitions or terms dealing with energy development and plant siting for the Common Data Element Task Force.

Dr. Meyer reported that a letter was sent to each member of the Subcommittee asking for possible ideas or suggestions. However, it was Dr. Brophy who submitted a report which he felt should be incorporated into the final report. The report contained a dictionary of terms used generally in this particular Task Force, rather than specific words and definitions.

Dr. Meyer asked that this letter asking for assistance and the report submitted by Dr. Brophy be included in the minutes for circulation and the Chairman of the Common Data Element Task Force be advised that the Subcommittee would be willing to provide further information if necessary.

There being no further business the meeting was adjourned at 2:15 p.m.

Following adjournment several members toured the gasification plant in Rapid City.



Final Report  
of the  
FORT UNION REGIONAL TASK FORCE  
ON  
RECLAMATION AND LAND USE

Compiled by Project Coordinator  
and  
Edited by Task Force Members

December 1976



Project Coordinator's  
Summary Report

The Fort Union Regional Task Force on Reclamation and Land Use thoroughly acquainted themselves with the four states' reclamation laws. Administrators of those laws gave general approval to their present content.

Tours were taken of reclamation areas in Montana, South Dakota, and Wyoming, with general good response to the reclamation efforts.

The task force reviewed land use patterns and planning, and concluded that the states must plan now for where they want to be, and how they want to best utilize their lands in the future.

TASK FORCE MEMBERS

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Senator Charles E. Flyte  
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Senator Jack Jackson  
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Mr. Al Griffiths  
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Mr. Ed Williamson  
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Montana

Senator George F. Roskie  
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Senator Carrol Graham  
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Mr. Merle Brooks  
Wamsutter, WY 82336



## FINAL REPORT

### Introduction and Assignment

Various areas of concern relating to reclamation and land use were expressed during the panel discussion of reclamation and land use at the Fort Union Coal Conference held in Bismarck, North Dakota, in October 1975. Concerns and future discussion topics were delineated as follows:

1. Veto power of surface owner.
2. Surface owner versus mineral owner.
3. Mineral royalties or fair compensation for orphan mine reclamation.
4. Exchange of information and research projects among all branches of government and interested private sectors.
5. Guidelines as to when reclamation has been completed.
6. Possibility of common legislation.
7. Similar statutes on rules, regulations, and bonding provisions.
8. Preplanning of land use.
9. Reclamation and land use on Indian-owned land.

### Background

Senator Earl Christensen of Wyoming served as chairman of the task force. Senator George Roskie of Montana served as vice chairman. Ms. Kim Allen of the Wyoming Legislative Service Office served as permanent secretary for the task force. The Reclamation and Land Use Task Force held three meetings. The first organizational meeting was held Tuesday, May 25, 1976, in Casper, Wyoming. The second meeting was held Thursday and Friday, July 22-23, 1976, in Miles City, Montana; and the final meeting was held Thursday and Friday, September 23-24, 1976, in Belle Fourche, South Dakota.

### Information Researched

A priority of the reclamation and land use task force was exchanging information on the states' present reclamation laws

for comparison and analysis. One member from each state was responsible for compiling information on the following areas of concern:

1. A short review of the reclamation laws highlighting the following points:
  - a. Schedule of fees.
  - b. Bonding.
  - c. Taxation.
  - d. Status of surface owner.
  - e. Status of mineral owner.
  - f. Definition of when reclamation is completed.
  - g. What is expected after reclamation.
2. What is the extent of preplanning and land use planning in your state at this time?
3. An analysis of the reclamation cost on electricity bills according to coal Btu levels. (See Appendices "A", page 232, "B", page 237, "C", page 242, and "D", page 248, for a summary of these reports for North Dakota, South Dakota, Montana, and Wyoming respectively.)

The Wyoming Legislative Service Office did a comparison and analysis of the four states' reclamation laws, on many different components of the relevant regulations. (See Appendix "E", page 255, for this analysis.)

The Fort Union Regional Task Force on Reclamation and Land Use visited two reclamation areas: the coal mining reclamation area near Colstrip, Montana; and the bentonite mine sites near Belle Fourche, South Dakota. The task force members responded positively to the success of reclamation after visiting these reclamation sites. At Colstrip, Montana, it was found that through reclamation productivity had been increased to allow more cows to graze on fewer acres than prior to mining. Reclamation in South Dakota was equally successful. Western Energy Company (the coal mining company at Colstrip, Montana) and Beroid Petroleum Services (operating the bentonite mines in Belle Fourche, South Dakota) submitted written reports to the task force members on their companies' attitudes on reclamation. (See Appendices "F", page 261, and "G", page 263, for these reports.) The task force was interested in learning about mineral taxes in the four-state area. A report was presented at the second meeting. Summaries of mineral tax information can be found in the final report of the Taxation of Energy Resources Task Force.

The task force continually monitored federal legislation, relating generally to energy development and specifically to reclamation, which might directly involve the four states. At the federal level no reclamation law has been passed after many attempts. Federal law directly affecting the Fort Union region were the amendments to the Mineral Leasing Act of 1920 which increased the percentage of federal mineral leasing revenue returned to the states.

The task force heard a report on reclamation and land use planning on Indian lands by Chaske Wicks, a task force member. At the present time, land use studies are being completed for Indian lands in the Fort Yates area of North Dakota. Mr. Wicks will make this available to the task force at its completion.

The Reclamation and Land Use Task Force requested the Common Data Element and Information Exchange Task Force to implement an information exchange system among all branches of government and interested persons and entities in the private sector exchanging related research projects and other pertinent data on land use and reclamation in the four-state area. The Common Data Element and Information Exchange Task Force has completed this task. (See Appendix "H", page 265 for copy of resolution.)

In response to the Common Data Element and Information Exchange Task Force request for information on common data elements (See Appendix "I", page 266 for copy of resolution), a subcommittee of the Reclamation and Land Use Task Force prepared a glossary of common data elements or terms on reclamation and land use. (See Appendix "J", page 267).

The task force reviewed various publications and information sources on reclamation and land use. A list of information sources for the Reclamation and Land Use Task Force are as follows:

1. "Energy Research Information System" (ERIS) quarterly reports published by the Old West Regional Commission and Surface Environment and Mining (SEAM).
2. "A Guide to State Programs for the Reclamation of Surface Mined Areas" by the United States Geological Survey.
3. "Land Use: Trends and Policies in the Upper Midwest." A study sponsored by the Upper Midwest Council. Principal author Joe Stinchfield.
4. "Northern Great Plains Coal: Conflicts and Options in Decision Making: A Future Choices Project of the Upper Midwest Council, April 1976." A study sponsored by the Upper Midwest Council. Principal author and project manager Michael J. Murphy.

5. State universities and agricultural research services.
6. Mining companies involved with reclamation.
7. The respective state agencies directing the reclamation programs.
8. "A Selected Bibliography on Surface Coal Mining and Reclamation of Particular Interest to the Great Plains States." A publication of the Agricultural Economics Department of the North Dakota State University.

Copies of the minutes for the three task force meetings are attached as Appendices "K", page 271, "L", page 276, and "M", page 283.

Upon review of the final report, task force members were given an opportunity to make additions, corrections, changes, or amendments. See Appendix "N", page 291, for additional comments.

#### Recommendations and Actions

The task force recommended that this type of interstate contact and discussion continue on the issue of land reclamation and use. The project coordinator was directed to apply for additional moneys to support the functioning of the task force through the Old West Regional Commission as well as asking the National Science Foundation for a time extension on the present grant in order for the remaining moneys to be used toward the continuing task forces.

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July 9, 1976

## MEMORANDUM

TO: Senator Shirley Lee

FROM: Legislative Council Staff

RE: Reclamation of Surface Mined Lands and Land Use Planning

1. a. An application for a surface mining permit must be accompanied by the following fees:
  - (1) A nonrefundable fee of \$250.
  - (2) A refundable fee of \$10 per acre or fraction thereof, for all affected land under the permit. The \$10 an acre fee is refundable to the mining operator if the application, or any amendments, is rejected. (See North Dakota Century Code Section 38-14-04.)
- b. An application for a surface mining permit must be accompanied by a bond, payable to the State of North Dakota, with a corporate surety, in the penalty sum of \$1,500 per acre or fraction thereof of land to be affected under the mining permit within the ensuing year. The Public Service Commission (PSC) may require a larger bond if it determines the cost of reclamation may exceed \$1,500 per acre. Cash or securities in the amount of the bond may be deposited with the PSC in lieu of the surety bond.

If the bond is forfeited for failure to comply with Chapter 38-14, it fully satisfies all obligations of the mining operator.

The amount of the bond penalty may be reduced on a percentage basis for completion of certain activities, e.g., 40 percent for backslipping and grading of the mined area, 30 percent for resspreading plant growth material, and the remaining 30 percent when reclamation is finally completed. (See NDCC Section 38-14-07.)

- c. In lieu of any sales or use taxes on coal, there is imposed a coal severance tax in the amount of 50 cents per ton. The amount of the tax is increased one cent per ton for every three point increase in the wholesale price index, as determined by the State Tax Commissioner. The tax cannot be reduced. The tax is payable by each mining operator on a quarterly basis, within 30 days after the close of the quarter. Any tax payments that are delinquent are charged interest at eight percent per year, and if the tax is not paid within 15 days after notice of delinquency from the commissioner, the commissioner notifies the PSC, which must suspend the mining permit of the operator. Taxes under this law are a paramount lien on the real and personal property of the mining operator. All tax collections under this chapter are placed in a special coal development fund for use in aiding areas affected by the impact of coal development. (See NDCC Chapter 57-61.)
- d. The "status" of the surface owner is affected by the Surface Owner Protection Act (NDCC Chapter 38-18) and the Coal Leasing Practices Act (NDCC Chapter 38-17).

Generally, the Surface Owner Protection Act provides for protection of the agricultural economy of North Dakota as follows:

- (1) The mineral developer must give written notice to the surface owner of the type of land disturbance the mining will cause, along with a map of the affected area, at least 30 days before submitting an application for a surface mining permit with the Public Service Commission.
- (2) A statement of consent by the surface owner to the mining activity must accompany the surface mining permit application submitted to the PSC.
- (3) A copy of the mineral lease executed by the surface owner may be filed with the PSC in lieu of the statement of consent.
- (4) If the surface owner and mineral developer are unable to agree on compensation, the mineral developer may bring an action in district court to determine whether the surface owner is adequately compensated for land disturbance. The district court has the authority to order the PSC to issue a mining permit without the consent of the surface owner.
- (5) If no payments to the surface owner are provided in the mineral lease, surface lease, or consent statement, disruption payments are to be made to the surface owner by the mineral developer for lost agricultural production.

- (6) If the mining operation comes within 500 feet of a farm building, the mineral developer must pay the surface owner the fair market value of the building or the cost of moving the building.
- (7) The rights granted to the surface owner by the law are unwaivable by the surface owner.
- (8) The mineral developer is financially responsible for the entire cost of reclamation, and is not limited by the bonding amount requirements of Chapter 38-14.

Generally, the Coal Leasing Practices Act provides for protection to the surface owner from "sharp" practices in acquiring coal leases as follows:

- (1) Either party to a coal lease may cancel the lease upon written notice to the other party within 15 business days after the execution of a lease.
  - (2) The maximum term of a coal lease, executed after April 9, 1975, is limited to 20 years, unless actual mining operations are taking place upon the leased property, or the land is subject to a valid mining permit. Extensions of the primary 20-year term may be negotiated.
  - (3) Notice of an advance royalty clause is required to be prominently displayed on the lease form and acknowledged by the lessor. (Advance royalty clauses allow deductions from regular royalties of the amount paid earlier for bonuses, rent, and damages.)
  - (4) The provisions of the chapter are non-waivable by either party to the lease.
- e. The "status" of the mineral owner is variously affected by numerous chapters of North Dakota law on coal development. His benefits from owning the mineral estate are affected by statutes concerning payment of taxes, acquisition of a mining permit, compliance with leasing practices, and compliance with mining practices. The mineral owner's profit on any lease could be substantially affected by any noncompliance with the law by the mineral developer.
- f. Reclamation is completed, according to NDCC Chapter 38-14, when areas affected by mining are conditioned to encourage productive uses such as forests, pastures, crops, wildlife and aquatic uses, recreational, residential or industrial sites, or any combination thereof; to conserve and develop natural resources; to aid in maintaining and improving the tax base; and to protect the health, safety, and general welfare of the people of North Dakota. When this conditioning is accomplished is a decision of the PSC. The law provides that the reclamation is to be accomplished within three years after the permit term expires, but the time must

be extended by the PSC from year to year for five years at the request of the mining operator. In addition, the PSC can extend the reclamation term indefinitely, at its discretion, or it may declare forfeiture of bond.

- g. After reclamation and release of bond by the PSC, the expectation is that the land will be able to support the use or uses prescribed in the reclamation plan. If the reclamation does not come up to expectation after all efforts have been made, and the PSC has released the bond, then there is probably no recourse. It is true that Chapter 38-18 requires the mining operator to bear all expense necessary to reclamation, not being limited to the amount of the bond in Chapter 38-14, but once the PSC releases the bond of the operator and thereby approves the reclamation it would seem nearly impossible to compel the operator to rework the reclamation if it did not live up to expectations in future years.
2. Currently, land use planning in North Dakota is accomplished on a local or restricted regional basis. The cities, counties, and organized townships of North Dakota have zoning powers that may be exercised independently or jointly through regional or metropolitan planning commissions established between them. (See NDCC Section 11-33-19 and Chapters 11-35, 54-34.1, and 54-40.)

There is a State Planning Division which has only advisory and assistance powers to consult and coordinate with local or regional planning and zoning agencies or commissions. In North Dakota there is no general statewide, or large regional, planning authority.



JANET SAUTER  
SECRETARY



PUBLIC  
SERVICE  
COMMISSION

BISMARCK 58505

June 11, 1976

JUN 11 1976

Sheila Meidema  
Coordinator  
Fort Union Task Forces  
Legislative Council  
State Capitol  
Bismarck, ND 58505

Dear Ms. Meidema:

At the May 25th meeting of the Fort Union Reclamation and Land Use Task Force, a request came from the group that information be furnished by me relative to what information I might have concerning the costs of reclamation which the average electric consumer would pay per month.

If the reclamation costs were \$5,000 per acre, the average cost per kwh would be .038¢. In North Dakota, the electric consumers average 525 kwh per month. Multiplying .038¢ per kwh times 525 will give you an average customer cost per month of 20¢.

These cost figures are less than the figures which I used as a very rough estimate in Wyoming. However, our Engineering Department has figured very closely on this, so I think the 20¢ figure is quite accurate.

Sincerely yours,

  
Bruce Hagen  
Commissioner

BH:djg

sent to all members of the Fort Union Reclamation and Land  
Use Task Force

South Dakota's reclamation law is contained in SDCL 45-6A, the Surface Mining Land Reclamation Act.

- A. Schedule of fees. There are actually several fees that must be paid:
1. Fee for application for exploration permit. The cost of such an application is \$25 and has a duration of one year. This permit can be renewed for \$25 or may be suspended or revoked if the permit holder violates this chapter.
  2. Fee for application for surface mining permit. The cost of such an application is \$50; but if the one seeking the permit has already received an exploration permit, then the cost of that permit is credited to the fee for the surface mining permit. This permit may be renewed.
- B. Bonding. In both of the above cases, within the application there must be a bond in the amount of the cost of reclamation of the land, submitted by the one applying for the permit. If he ever fails in his duty of reclamation, his permit is revoked and his bond is forfeited. The bond is then used for reclamation of the land in accordance with the chapter.
- C. Taxation. The mine is figured into the value of the real property for taxing purposes. Also, there is a mineral extraction tax (SDCL 10-39). For the privilege of mining or extracting minerals or mineral products in this state, every person in the business of mining or extracting minerals or mineral products in this state shall pay to the state a license tax equal in amount to four per

cent of the net profits from minerals or mineral products mined or extracted, said tax to be payable on or before the first day of June of each year.

The tax is computed and paid quarterly for all producers who extracted more than \$100,000 worth of minerals during the preceding calendar year. Any excess or shortages of payments will be made up at the time of final yearly payment before June 1.

Accompanying the tax payment will be a statement of net profits. If the miner fails to do this, a fine of from \$100 to \$5000 may be imposed. Also, any unpaid taxes are a debt to the state and a lien on the property.

This tax is in full and in lieu of all other occupational, excise, income, privilege and franchise taxes, levied by the state of South Dakota, but shall not be in lieu of sales, use or property taxes.

D. Status of surface and mineral owners. According to 45-4-13 and 45-4-14:

When the right to mine is in any case separate from the ownership or right of occupancy to the surface, the owner or rightful occupant of the surface may demand satisfactory security from the miner, and if it be refused, may enjoin such miner from working until such security is given.

Every person, firm, association or corporation who may hereafter make or sink discovery shafts, open cuts, adits or equivalents thereto, upon any mining claim, or on any mineral property, ground, or premises shall forthwith, while using the same, make them secure and safe in a manner either by means of a substantial fence or otherwise, so as to guard against the possibility of livestock falling into or in any manner becoming injured or destroyed by reason of such openings; and before abandoning the same, shall fill in or slope such openings, as a further precaution. Every person, firm, association or corporation that shall fail or refuse to fully comply with the provisions of this section shall be liable in damages for injury to or destruction of livestock caused thereby to the owner thereof and shall further be guilty of a misdemeanor and upon conviction thereof, shall be punished by a fine not to exceed one hundred dollars or by imprisonment in the county or municipal jail for not more than thirty days or both such fine and imprisonment.

E. Definition of when reclamation is complete. Within two years after cessation of the mining operation, the Conservation Commission shall inspect the land and the progress of the reclamation. If the mine operator has not fulfilled his duties, his bond may be taken to pay for the reclamation of the land. Reclamation will be complete when the vegetative growth complies with agronomic and forestry recommendations and the contour of the land is restored to substantially its condition before the mining operation. After reclamation, the land can be used however the owner wishes.

F. In South Dakota, SDCL 11-2 covers land use and planning for the state.  
Basically, the provisions are as follows:

For the purpose of promoting health, safety, morals and the general welfare of the county, the board of county commissioners of each county in the state, shall appoint a commission of three or more members, the total membership of which shall always be an uneven number and at least one member of which shall be a member of the board, to be known as the county planning commission. Such commission shall also be the county zoning commission.

The boards of two or more county commissioners may direct their planning commissions to plan jointly. Expenses incurred in connection with joint planning, including but not limited to contracted services, shall be shared equitably among the counties involved. Encouraging regional economic development, including but not limited to the creation of compatible controls in neighboring counties, shall be the objective of joint planning.

The governing body of any municipality may contract with the board for planning and zoning services to be provided by the county, and the contract may provide that the municipality shall pay such fees as are agreed for the services performed. Under the provisions of the contract the municipal governing body may authorize the county planning and zoning commission, on behalf of the city, to exercise any of the powers otherwise granted to municipal planning and zoning commissions.

If a county is conducting or in good faith intends to conduct studies within a reasonable time, or has held or is holding a hearing for the purpose of considering a comprehensive plan or

official controls, the board in order to protect the public health, safety and general welfare may adopt as an emergency measure a temporary zoning map and temporary zoning ordinance and other temporary official controls, the purpose of which shall be to classify and regulate uses and related matters as constitutes the emergency. Before adoption or renewal of such emergency measure or measures, the board shall hold at least one public hearing, notice of the time and place of which shall be given at least ten days in advance by publication in a newspaper having general circulation in the county. Such measures shall be limited to one year from the date they become effective and may be renewed for one year. In no case shall such measures be in effect for more than two years.

The county planning commission shall prepare, or cause to be prepared, not later than July 1, 1976, a comprehensive plan for the county including those municipalities within the county which are either unincorporated or which have requested by resolution of the governing board of such municipality to be included. Zoning ordinances, subdivision ordinances, the official zoning map, and other official controls as deemed necessary, shall be included as adjuncts to and in accordance with the comprehensive plan. It shall be the duty of the commission to also develop official controls for the implementation of the comprehensive plan.

The comprehensive plan shall be for the purpose of protecting and guiding the physical, social, economic and environmental development of the county; to protect the tax base; to encourage a distribution of population or mode of land utilization that will facilitate the economical and adequate provisions of transportation, roads, water supply, drainage, sanitation, education, recreation, or other public requirements; to lessen governmental expenditure; and to conserve and develop natural resources.

Official controls may include the establishment of zoning districts within which the use of land for agriculture, forestry, recreation, residence, industry and commerce, soil conservation, water supply, sanitation and additional uses of land may be encouraged, regulated or prohibited and for such purposes the board may divide the county into districts of such number, shape and area as may be deemed best suited to carry out the comprehensive plan.

For each zoning district zoning ordinances, or regulations may be adopted designating or limiting the location, height, bulk, number of stories, size of, and the specific uses for which dwellings, buildings and structures may thereafter be erected or altered; the minimum and maximum size of yards, or other open spaces; sanitary, safety and protective measures that shall be required for such dwellings, buildings and structures; the area

required to provide for off-street loading and parking facilities; flood plain areas; and to avoid too great a concentration or scattering of the population. All such provisions shall be uniform for each class of land or building throughout each district, but the provisions in one district may differ from those in other districts.

Whenever any board of county commissioners shall have adopted the comprehensive plan or any part thereof, then and thenceforth, no street, road, park, or other public way, ground, place, space, no public building or structure, no public utility, whether publicly or privately owned, if covered by the comprehensive plan or any adopted part thereof or adjunct thereto, shall be constructed or authorized in the county or within its subdivision jurisdiction, until and unless the location and extent thereof shall have been submitted to and approved by the planning commission, provided that in case of disapproval, the commission shall communicate its reasons to the board. By vote of not less than two-thirds of its entire membership, the board shall have power to override such disapproval.

The failure of the planning commission to act within sixty-five days from and after the date of official submission to it shall be deemed approval, unless a longer period be granted by the board or other submitting official.

The board may by resolution prescribe such regulations not contrary to law as it deems desirable or necessary to regulate and control, or reduce the number or extent of or bring about the gradual elimination of nonconforming uses and occupancies. Provided, however, that the lawful use or occupancy of land or premises existing at the time of the adoption of an official control may be continued, although such use or occupancy does not conform to the provisions of such official control. If such use or occupancy is discontinued for more than one year, the board may adopt, after notice by certified mail to the property owners, an amortization schedule to bring about the gradual elimination of such nonconforming use or occupancy.

MONTANA STRIP AND UNDERGROUND MINE RECLAMATION ACT

TITLE 50, CHAPTER 10, R.C.M. 1947

1. (a) The application fee for a strip mining permit is \$50.00 (50-1040). The application fee for a prospecting permit is \$100.00 (50-1041) and is used as credit toward the mine permit fee if the permit area becomes covered by a valid mining permit before the prospecting permit expires.

(b) Bond for a mining permit (50-1039)(5) shall not be less than \$200.00 nor more than \$2,500.00 for each acre or fraction thereof of the area of land affected, with a minimum bond of \$2,000.00. In no event shall the bond be less than the total estimated cost to the State of completing the work described in the reclamation plan. Bonding for prospecting drill holes is determined by the following schedule:

\$2,500 1st hole

\$1,000/hole for next 4 holes

\$500/hole for next 10 holes

\$100/hole for all holes thereafter.

The per hole figure can be higher if special problems exist in the prospecting area. Bond must be held for five years to insure that adequate revegetation occurs (50-1047)(3), but a portion of the bond can be released on reclamation work completed as outlined in (50-1044)(5).

(c) Operating coal mines are subject to the following taxing

jurisdictions: (1) the 30% coal severance tax which provides revenues for the State general fund, the impacted county's general fund, and to eight other funds; (2) the gross proceeds tax which is basically a property tax to the county; (3) the resource indemnity trust tax which accrues to the State; and (4) the property tax, 98% of which goes to the local governments. Title 50, Chapter 10, R.C.M. 1947 does not contain any taxing provisions.

(d) (50-1039.1) Protection of the surface owner. In those instances in which the surface owner is not the owner of the mineral estate proposed to be mined by strip mining operations, the application for a permit shall include the written consent, or a waiver by, the owner or owners of the surface lands involved to enter and commence strip mining operations on such land, except that nothing in this section applies when the mineral estate is owned by the federal government in fee or in trust for an Indian tribe.

(e) Before any mining can take place, the applicant must furnish to the Department proof of the source of the legal right to mine the mineral in the land affected by the permit and the names and addresses of the present owners of record of all subsurface minerals in the land to be affected. (50-1039)(2)(c)(d)

(f) and (g) (50-1045) After the operation has been backfilled, graded, topsoiled, and approved by the Department, the operator shall prepare the soil and plant such legumes, grasses, shrubs, and trees upon the area of land affected as are necessary to provide a suitable



permanent diverse vegetative cover capable of:

- (a) feeding and withstanding grazing pressure from a quantity and mixture of wildlife and livestock of least comparable to that which the land could have sustained prior to the operation;
- (b) regenerating under the natural conditions prevailing at the site, including occasional drought, heavy snowfalls, and strong winds; and
- (c) preventing soil erosion to the extent achieved prior to the operations.

2. Preplanning under this law is both extensive and detailed. Before any mining permit can be granted, detailed inventories of vegetation, soils, hydrology, water and air quality, overburden and innerburden, and wildlife must be accomplished. The mining and reclamation plan must deal with all aspects of the yearly permit as well as answer any questions that might arise with the life of the operations. Questions regarding the final highwall reduction, materials needed to backfill the final pit, reclamation of drainages must all be answered. To date, the only attempt to discuss land use planning with preplanning comes when an Environmental Impact Statement must be prepared according to the rules of the Montana Environmental Policy Act. No formal apparatus exists for this Department to coordinate with any planning agency to develop comprehensive land use plans in the mining areas. Land use planning is,

however, being widely studied on both the State and local level.

3. \*See attached memo from the Montana Energy Advisory Council.



# MONTANA ENERGY ADVISORY COUNCIL

STATE CAPITOL  
HELENA, MT 59601

BILL CHRISTIANSEN, CHAIRMAN

July 19, 1976

## MEMORANDUM

TO: Paul Melvin, Reclamation Division, Department of State Lands  
FROM: Terry Wheeling, Energy Data Specialist  
RE: Reclamation Costs Computed Per Kilowatt-Hour Generated

The method used to calculate costs of reclamation per kilowatt-hour generated is as follows:

$$\frac{\text{Reclamation Costs}}{\text{Acre}} \times \frac{\text{Acres Disturbed}}{\text{Million Tons}} \times \frac{\text{Tons Burned}}{\text{Million KWH}} = \frac{\text{Costs}}{\text{KWH}}$$

Representative data for the Western Energy Company was gathered as follows:

Reclamation costs per acre	=	\$2,000/acre	<u>1/</u>
Acres disturbed per million tons produced	=	24.408 acres	<u>2/</u>
Tons burned per million kwh generated	=	677,40 tons	<u>3/</u>

Costs/KWH	=	2,000 x 24.408 x 677.40
	=	\$33,068/10 <sup>9</sup> kwh
	=	\$.033068/10 <sup>3</sup> kwh
	=	.033068 mills/kwh
	=	.033068/kwh

- 
- 1/ Paul Melvin, letter dated June 8, 1976.  
2/ Sharon Solomon, Montana Energy Advisory Council, memorandum dated March 29, 1976.  
3/ Montana Power Company, Annual Report to Federal Power Commission (FPC Form 1) for 1975.

Memorandum to Paul Melvin  
July 19, 1976

(verification on BTU basis of tons burned per million kwh generated:

$$\begin{array}{lcl} 677.4 \text{ tons} \times 8,500 \text{ BTU/lb.} & \overset{4/}{=} & 11,515.8 \times 10^6 \text{ BTU} \\ 1 \times 10^6 \text{ kwh} \times 3,412 \text{ BTU/kwh} & = & 3,412 \times 10^6 \text{ BTU} \end{array}$$

$$\text{efficiency} = \frac{3,412}{11,515.8} = .296 = 29.6\% \text{ efficiency)$$

In Montana during 1975, 1,544<sup>5/</sup> million kwh out of a total of 11,231<sup>6/</sup> million kwh were from coal-fired generation, giving about 14 percent of total electricity generated. Distributing the above calculated reclamation costs per kwh overall electricity generated then gives  $.14 \times .0033068 \text{ cents/kwh} = .000463 \text{ cents/kwh}$ . Average monthly residential electricity consumption in Montana during 1974 was 610 kwh/month <sup>7/</sup>, which then gives  $610 \text{ kwh} \times .000463 \text{ cents/kwh} = .282 \text{ cents per month per residential consumer}$ .

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4/ Ibid.

5/ Federal Power Commission.

6/ Ibid.

7/ Edison Electric Institute.

TW/sb

WYOMING ENVIRONMENTAL QUALITY ACT  
Land Quality

W.S. 35-502.20 through 35-502.41

Summary of provisions with regard to fees; bonding; surface owner and mineral owner status; completion of reclamation; post reclamation expectations; and land use planning.

FEE PROVISIONS

Application for Mining Permit Fee.

Required in order to commence and conduct mining operations on lands in state.

A minimum fee of one hundred dollars (\$100.00) plus ten dollars (\$10.00) per acre in the requested permit, but the maximum fee for any permit is two thousand dollars (\$2000.00).

Permit term for life of project.

Permit Amendment Fee.

Required to amend original permit or previously amended permit.

A fee of two hundred dollars (\$200.00) plus ten dollars (\$10.00) per acre amended not to exceed two thousand dollars (\$2000.00).

Mining License Fee.

Required for each mining operation for which a separate mining permit is issued.

Fee of twenty-five dollars (\$25.00).

License term for duration of mining operation on the permit area.

BONDING PROVISIONS

Performance Bond.

The amount must be equal to estimated cost of reclaiming affected land during first year of operation. The estimated cost shall be based on operator's cost estimate plus administrator's\*

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\*Administrator of Land Quality Division.

estimate of personnel and equipment required for reclamation should operator fail to comply. Bond shall not be less than ten thousand dollars (\$10,000.00) nor less than two hundred dollars (\$200.00) per affected acre.

Renewal Bond.

Amount estimated to reclaim disturbed land during renewal period and the estimated cost of completing reclamation of unreleased lands disturbed during prior periods of time. Bond to be based on operator's cost estimate plus administrator's estimate of personnel and equipment should operator fail or the site be abandoned. Bond shall not be less than ten thousand dollars (\$10,000.00) nor less than two hundred dollars (\$200.00) per affected acre.

Surface Owner Protection Bond.

Bond required of operator to surface owner if surface owner separate from mineral owner. Amount to be determined by administrator and must be sufficient to secure payment of any damages to surface estate, crops, forage, tangible improvements and disruption of surface owner's operation. Bond not required when agreement between surface owner and mineral owner waives the requirement.

Bond Release.

Upon completion of prescribed reclamation, up to seventy-five percent (75%) of bond may be released. Remaining portion shall not be less than ten thousand dollars (\$10,000.00) and shall be held for at least five (5) years after date of reduction to assure proper revegetation. Retained portion may be returned to operator earlier if signed by surface owner and approved by both administrator and director.\*

Tax Exemption.

Facilities, installation, machinery or equipment utilized in reclamation and pollution control, or in the event such facilities also serve other purposes, the portion assessed for reclamation and pollution control shall be exempt from ad valorem taxation.

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\*Director of the Department of Environmental Quality.

## STATUS OF SURFACE OWNER AND MINERAL OWNER

### Provisions Determining Surface Owner's Status.

1. The name of surface owner is required on both the application for mining permit and the mining map.
2. The operator is required to mail the application for mining permit to surface owner of affected land and surface owners of adjacent lands.
3. The surface owner is protected from destruction of animal life, wildlife, property, plant life and danger or interruption of on-going operations in or adjacent to the permit area.
4. The surface owner has the authority to release remaining portions of performance and renewal bonds to the operator.
5. If surface owner separate from mineral owner, the following provisions apply:
  - a. Mining and reclamation plans of operator must be approved by surface owner through instrument of consent;
  - b. Surface owner must grant permission to operator to enter and operate mining of land;
  - c. Operator required to execute bond for protection of surface owner. Surface owner may waive requirement, however; and
  - d. Surface owner may take action against operator for damage to surface or underground water supply resulting from surface or subsurface mining.
6. Immediate reclamation by operator not required if "land-owner" intends to further utilize product of mine and assumes reclamation thereof.

### Provisions Determining Mineral Owner's Status.

1. The name of mineral owner required on the application for mining permit.
2. The application for mining permit must be mailed to mineral owner of affected land and mineral owners of adjacent lands.
3. The mineral owner may be required to join with operator as principal of performance and renewal bonds, at the discretion of the Environmental Quality Advisory Board.
4. Immediate reclamation by operator not required if "land-owner" intends to further utilize product of mine and assumes reclamation thereof.

## COMPLETION OF RECLAMATION

NOTE: Before a mining permit is granted the operator, the operator must submit a reclamation plan, among other materials, to the administrator for approval. At this time, each particular mining operation and its subsequent reclamation standards will be determined. Basically, all reclamation projects must meet the following standards in order to fulfill requirements:

1. All reclamation and mining operations must be completed in conformity with approved plan;
2. All toxic, acid-forming or radioactive material or any detrimental material capable of destruction to health, safety or surface or underground waters must be covered, buried, impounded, contained or otherwise disposed of;
3. Contouring operations must have returned land to the use specified by reclamation plan;
4. Grading and shaping of land to assure at minimum the highest previous use and to blend into surrounding terrain as specified by reclamation plan;
5. Replace preserved and segregated topsoil or approved subsoil, or replace with superior soil, as specified by reclamation plan;
6. Replace native or superior self-regenerating vegetation on affected land as required in reclamation plan; and
7. Prevent, and for a period of five (5) years after termination of operation, pollution of surface and subsurface waters on affected land by revegetation, construction of drainage systems and treatment facilities including settling ponds and casing, sealing of boreholes, shafts and wells so that no pollution is allowed to drain untreated into surface or subsurface water as required by reclamation plan.

## POST RECLAMATION EXPECTATIONS

To return utility and capacity of reclaimed land to the highest previous use of affected lands, surrounding terrain and natural vegetation, surface and subsurface flowing or stationary water bodies, wildlife and aquatic habitat and resources, and acceptable uses after reclamation.



## EXTENT OF PREPLANNING OR LAND USE PLANNING

NOTE: When applying for mining permit, the operator is required to submit basic data describing, identifying and mapping the land included in permit area. This requires legal identification, general description including vegetative cover, annual rainfall, etc., the mineral to be mined and mapping as specified by the administrator.

The application also requires a reclamation plan specifying the extent to which the mining operation will disturb, change or deface affected land, proposed future use or uses and reclamation requirements of affected land to meet proposed future use or uses.

Enumerated are the basic requirements with regard to pre-planning or land use planning:

1. A statement of present and proposed future use of affected land after reclamation;
2. Plans for surface gradient to a contour suitable for proposed use after completion of reclamation and proposed method of accomplishment;
3. Type of vegetation and manner of proposed revegetation or other surface treatment suitable for future use of affected area;
4. Method of disposal of buildings and structures erected during operation;
5. Maps depicting location and extent of affected area and location of highways, dwellings, surface drainage area and all utilities or easements. Also shall identify pits, spoil banks, topsoil conservation areas, haul roads, railroads, buildings, refuse or waste areas, shipping areas and further set forth the drainage plan of both surface and subsurface waters;
6. Contour map showing contours after reclamation;
7. Estimated cost of reclamation;
8. Topsoil, subsoil and soil pile care, conservation and future use;
9. Disposal or treatment of toxic, acid-forming and various potentially dangerous materials;
10. Methods of diverting surface water around affected lands for pollution control and erosion;
11. Methods and means of reclamation for effective control of erosion, siltation and pollution of affected stream channels and banks;
12. The quantity and quality of water used in mining and reclamation operations; and
13. A projected timetable of completion of all activities.



THE STATE OF WYOMING

ED HERSCHLER  
GOVERNOR

# *Department of Economic Planning and Development*

BARRETT BUILDING

CHEYENNE, WYOMING 82002

PHONE (307) 777-7284

JOHN NILAND  
EXECUTIVE DIRECTOR

September 21, 1976

Mr. David Nelson  
Legislative Service Office  
State Capitol Building  
Cheyenne, WY. 82002

Dear Mr. Nelson:

As requested by your phone call of last week, we have worked up some figures for reclamation costs per million BTU's of some representative coal mines in Wyoming.

The methodology used was to get reclamation costs per acre from the Department of Environmental Quality on the various mines, then compute the tons per acre and BTU's based on information that we have on the various mines.

We also computed a very generalized state average just for comparison purposes.

## Kerr-McGee Proposed Jacobs Ranch

## (Powder River Basin)

Average Seam Thickness:	42'
tons/acre	73,500
BTU/lb.	9,400
BTU/acre	13.82 X 10 <sup>12</sup> (1.38 trillion)
Rec. cost/acre	\$1,615 (claimed)
Rec. cost/ton	2.2¢
Rec. cost/million BTU	.1¢

## Very Generalized State Average

Seam Thickness	30'
tons/acre	52,500
BTU/lb.	9,200
BTU/acre	9.66 X 10 <sup>12</sup> (966 billion)
Rec. cost/acre	\$11,000
Rec. cost/ton	20.9¢
Rec. cost/ million BTU	1.1¢

Bridger Mine

(Green River Basin)

Average Seam Thickness	23'
tons/acre	40,250
BTU/lb.	9,350
BTU/ton	18.7 million
BTU/acre	7.53 X 10 <sup>12</sup> (753 billion)
Reclamation Cost	\$6,000 acre
Reclamation Cost/ton	15¢
Reclamation Cost/million BTU	.8¢

EDC Rimrock Mine

(Hanna Basin)

Average Seam Thickness	7.5'
tons/acre	13,125
BTU/lb.	11,200
BTU/ton	22.4 million
BTU/acre	2.94 X 10 <sup>12</sup> (294 billion)
Reclamation Cost/acre	\$5,685.68
Reclamation Cost/ton	43¢
Reclamation Cost/million BTU	1.9¢

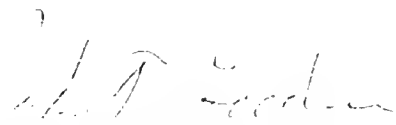
Kemmerer Coal Sorenson Mine

Kemmerer

Average Seam Thickness	25'
tons/acre	43,750
BTU/lb.	9,750
BTU/acre	8.53 X 10 <sup>12</sup> (853 billion)
Reclamation Cost/acre	\$3500.00 (claimed) (pre '73 land)
Reclamation Cost/ton	8¢
Reclamation Cost/million BTU	.4¢

Hopefully this information will be adequate. Please call if we can be of further assistance.

Sincerely yours,

  
John T. Goodier  
Chief of Mineral Development

# STATE STATUTORY REQUIREMENTS

## REGARDING THE REHABILITATION OF SURFACE MINED LAND\*

Components of the Regulation	Colorado	Montana	North Dakota	Wyoming	South Dakota
Effective Date of Current Law	7/1/69 (Amended 7/1/73)	3/14/73 (Amended 3/14/74 and 3/31/75)	1/1/70 (Amended 7/1/73) and 4/8/75)	7/1/73 (Amended 3/12/75 and 3/1/76)	7/1/71 (Amended 3/10/73 and 3/28/75)
Operations Exempted from the Law	none	10,000 cu. yds. removed; any political sub- division or agency of the state exempt from certain provi- sions	none (however <10ft. cu. yds./ 36 mos. or 1 ac/ 36 mos. subject to special provisions)	Mining of sand or gravel 5 ac or less (however 4,000 tons over burden removed or 2 ac/yr. exempt from cer- tain provisions)	none (however, 1,000 tons or less removal of min- erals per year, publicly owned lands, and pegma- tite mines remov- ing 2000 tons or less of minerals per year exempt from certain pro- visions)
Lands Protected from Mining	none	Unique values; if unreclaimable; must area strip	Unique values; if unreclaimable	Unique values; if unreclaimable	Unique values; if unreclaimable
"Affected Land" Includes Access Roads and Railroads	no	yes	no	yes	yes
Specific Provisions for:					
Baseline Studies	no	no	yes	yes	no
Monitoring	yes	yes	yes	yes	yes
Research	yes	yes	yes	yes	yes

APPENDIX "E"  
Prepared by  
Wyoming Legislative  
Service Organiza-  
tion Staff

Components of the Regulation	Colorado	Montana	North Dakota	Wyoming	South Dakota
Rehabilitating mines abandoned before or after enactment of the law	yes	yes	yes	yes	yes
ADMINISTRATIVE SANCTIONS					
Suspension or Cancel- lation of Permit	yes	yes	yes	yes	yes
Reinstatement Possible	yes	yes	no (must cease other mining activities within the state within 30 days of for- feiture)	yes	yes
Denial of subsequent permits to operate	yes	repeated violations	yes	yes	yes
MINING PERMIT REQUIREMENTS					
Permit Term	5 years	1 year	3 yr. (extend- able by 2 yrs.) and 3 yr. to rehabilitate	life of project	1 year
Submitted to Which Agency	Land Reclamation Board	Dept. of State Lands	Public Service Commission	Dept. of Environ- mental Quality Act - Land Div.	State Conserva- tion Commission

Components of the Regulation	Colorado	Montana	North Dakota	Wyoming	South Dakota
Information Concerning Operator's Past History Required	yes	yes	no	yes	no
Baseline Studies Required	yes	yes	yes	yes	no
Mining Plan Required	yes	yes	yes	yes	no
Rehabilitation Plan Required	yes	yes	yes	yes	yes
Monitoring Plan Required	no	no	no	yes	no
Intended Land Use Plan Required	yes	yes	yes	yes	yes
Provisions for Public Survey	yes	yes	yes	yes	no
REGULATORY MEASURES					
Regulatory Agency	Land Reclamation Bd. and Division of Mines	Dept. of State Lands	Public Service Commission	Dept. of Environ- mental Quality Act, Land Div.	State Conservation Commission
Regulations Primarily Set by	Statute, some by agency	State, agency commissioner	Statute	Statute and Agency	Agency
Provisions for Monitor-					

Components of the Regulation	Colorado	Montana	North Dakota	Wyoming	South Dakota
ing to be Performed by the Agency	yes	yes	yes	yes	yes
Reports Required from the Operator to the Agency					
Annual	yes	yes	yes	yes	yes
On Completion of Mining Operation	yes	no	no	no	no
On Completion of Grading and Shaping	no	yes	no	no	no
On Completion of All Obligations	yes	no	no	no	no
REHABILITATION REQUIREMENTS					
Collection of Baseline Data	no	no	no	no	no
Monitoring	no	no	no	yes	no
Specified Commencement of Rehabilitation	no	as soon as possible	no	earliest pos- sible time	as soon as possible
Specified Completion of Rehabilitation	no (can rehab- ilitate land elsewhere as a substitute)	Before machinery is removed from operation site	Within 3 yr. of expiration of permit (Extend- able by 2 yr.)	no	no

Components of the Regulation	Colorado	Montana	North Dakota	Wyoming	South Dakota
Is the Best State-of-the-Art Technology Required	no	yes	no	yes	no
Is Compensation for Loss of Water Considered	no	yes	yes	yes	Left to discretion of Agency
Grading and Shaping	According to proposed future land use	To original contour of the land; according to proposed future use; no contour mining	To original contour or rolling topography unless defined otherwise by plan for a higher use	To assure (at minimum) highest previous use; to blend into surrounding terrain	According to proposed future use
Slope Restriction of Mining	no	no	no	no	no
Slope Restriction of Spoils	no	To approximate contour of the land; 20°	Final cut 35° to permit traverse by farm machinery	no	no
Drainage Considerations	yes	yes	yes	yes	left to discretion of agency
Aesthetic Considerations	no	no	yes	no	yes



Components of the Regulation	Colorado	Montana	North Dakota	Wyoming	South Dakota
Topsoil Requirements	no	yes	5 ft. where available if not, as much as possible	yes, unless other types of soil are superior	as determined by agency
Burial of Toxic Materials	yes	yes	no	yes	no
Revegetation	no	Permanent cover, diverse cover, self-regenerating to at least quality and quantity before mining	According to rehabilitation, plan must be perennial or annual crop species	Native or superior, self-regenerating vegetation; planted on the contours	as determined by agency
Period of Time to Evidence Vegetative Stability	no	At least 5 yr.	no	At least 5 yr.	no
Public Notice Before Bond Release	no	yes	no	no	no

TO: Task Force Members  
Reclamation and Land Use Task Force  
Fort Union Regional Task Forces

APPENDIX "F"  
Prepared by  
Bentonite Industry

FROM: Bentonite Industry - Belle Fourche, S. D. and Colony, Wyoming

SUBJECT: Bentonite Industry Views on Mined Land Reclamation and Land Use.

The following are comments from the bentonite industry concerning mined land reclamation and land use legislation. These comments are general in nature and represent a consensus of opinions of the bentonite companies in the Belle Fourche S. D. and Colony, Wyoming area. We would be happy to provide more specific comments or suggestions on these subjects to any task force member or legislator if they so desire.

#### LAND USE

Minerals of many varieties are in absolute necessity for the survival of the human race at practically any level of civilization. It is also a fact that mineral deposits are finite and their occurrence is limited to specific locations determined by geology. In all cases, mineral extraction is a temporary land use, and after mining, the land can be returned to other productive use. For these reasons, we believe mineral extraction should be among the highest of priorities for land use. Withdrawal of land from mineral development and unreasonable laws and regulations which effectively prohibit mining will severely limit the availability of minerals which are a basic necessity.

#### RECLAMATION LAWS

The bentonite industry believes that the various states should control the reclamation of all lands mined within the state and that federal legislation regarding reclamation is not required. In exercising this control, the legislature must recognize the necessity for mineral development and laws relating to mineral development should be structured so that environmental impact from mineral development is kept to a reasonable minimum and that reclamation to a productive use is guaranteed by the mineral developer.

In the bentonite industry, there are many instances where the mineral developer does not own the surface of the land to be mined. Current mining laws provide for the protection of the rights of the surface owner with reasonable compensation for the economic losses suffered due to mining. However, there are no laws which require the surface owner to recognize his responsibility in managing the lands in a manner so that the mineral developer can accomplish the required reclamation. Some legislation relating to land owner responsibilities may be required to insure that reclamation can be accomplished.

#### ADMINISTRATION OF RECLAMATION LAWS

Some of the administrators of the state reclamation laws have their own personal interpretation of the law and are not responsive to the intent of the legislature when the reclamation law was written. The interpretation of the reclamation laws changes with every change in personnel.

The mining industry should be represented in some manner in the administration of the reclamation laws. At least some members of the staff should have some mining background. Most administrators are trying to dictate the day to day operating procedures at the mine rather than evaluating the actual reclamation results. The department should set reclamation standards by the normal rule making process and then evaluate the reclamation according to those standards.

Both the legislature and the administrators of the various reclamation laws should recognize that every type of mining operation has different operating conditions and will require different mining and reclamation techniques and the reclamation costs will be different. In some instances, bonding levels are being set at unreasonably high levels without any relation to the actual cost of reclamation. One state is also asking for bonds on thousands of acres when only a small percentage of that area will actually be disturbed. We ask that bonding levels be set at a level adequate to accomplish the reclamation if the mineral developer fails to do so. We also request bonds be required only for lands that will actually be disturbed.

For each new permit application or permit the reclamation departments are requiring more and more detailed base line studies. The requirements of these base line studies are often administrative decisions without benefit of the normal rule making procedure. We agree that base-line studies may be necessary in some areas, but, where effective reclamation has already been demonstrated, these studies add very little to the reclamation effort except cost.



## WESTERN ENERGY COMPANY

GENERAL OFFICES 40 EAST BROADWAY, BUTTE, MONTANA 59701.

November 8, 1976

Ms. Sheila Miedema  
Project Coordinator  
Fort Union Regional Task Forces  
Legislative Council  
State Capitol  
Bismarck, ND 58505

Dear Sheila:

Thank you for your letter of October 22, 1976. I apologize for the late response. Since I am now in Butte and your letter initially went to Colstrip, I did not receive your letter until early this week.

I do have some comments relating to Western Energy Company's policy on land use and reclamation.

The mining of coal in today's society is as important as the harvesting of this nation grain timber and other resources whether they are renewable or not. The standard of living that this country has developed and for the most part enjoys demands that the coal be mined.

At this time the most economical means of meeting the coal demand on a large scale is by strip mining. Although this approach does destroy the existing natural communities, technology that has been developed through research gives mankind the capabilities of reclaiming most of the area where coal mining will take place. Many detrimental affects to a given area scheduled for mining can be eliminated or minimized by obtaining a baseline inventory of the existing physical and human resources and using this information during the development and operation of the mine.

Although substantial amounts of money above and beyond the true value of the land are generally available for reclamation, there are certain features that can not be returned at any price. Only an assessment of the site-specific circumstances can answer the question of where do we draw the line between the

Ms. Miedema  
Page 2  
November 8, 1976

development of the coal resource and preservation of the ecosystem components. Governmental standards must identify this fine line.

Although we concur that regulations should require that the land always be returned to as close to the premining conditions as possible, we should not eliminate alternatives that will provide for a higher and better use of some areas.

As stated in the August 1975 issue of Coal Age, Western Energy realizes "that words alone do not reclaim mined land. Words alone do not meet the social responsibilities attendant with coal development." These goals can only be accomplished by doing.

Sheila, I know these comments are short, but I wanted to get something to you this week. Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, reading "Michael R. Grende". The signature is written in a cursive, flowing style with a long horizontal line extending from the end.

Michael R. Grende  
Permit Supervisor

MRG/la/5:4

RESOLUTION OF THE  
RECLAMATION AND LAND USE TASK FORCE  
TO THE  
COMMON DATA ELEMENT AND  
INFORMATION EXCHANGE TASK FORCE

WHEREAS, the Common Data Element and Information Exchange Task Force is set up for the purpose of exchanging information, as well as for development of a common data element dictionary; and

WHEREAS, the Reclamation and Land Use Task Force would like information exchanged between the four states of North Dakota, South Dakota, Montana, and Wyoming, with regard to research projects and other pertinent information relating to reclamation;

BE IT RESOLVED, that the Fort Union Regional Task Force on Common Data Element and Information Exchange be asked to coordinate information exchange between all branches of government and interested persons or entities in the private sector; with the exchange relating to research projects and other pertinent data on land use and reclamation in the four-state area.

COMMON DATA ELEMENT AND INFORMATION EXCHANGE TASK FORCE  
TO ALL FORT UNION REGIONAL TASK FORCES

WHEREAS, part of the charge of the Common Data Element and Information Exchange Task Force is to encourage development and compilation of a common data element dictionary; and

WHEREAS, task force discussion at its meeting of June 9, 1976, indicated the need for such a definition of terms; and

WHEREAS, the task force must initially define what a common data element dictionary should contain; and

WHEREAS, it was the general consensus of the task force that the dictionary not be a definition of terms, but an explanation of base data that is used in doing impact statements, energy demand studies, population projections, etc.

BE IT RESOLVED, that inasmuch as each task force possesses expertise in its own area, the Common Data Element and Information Exchange Task Force recommends that each task force develop its own definitions for their particular area of study and forward them to the Common Data Element and Information Exchange Task Force as soon as possible after the next meeting of the other task forces.

DICTIONARY OF COMMON TERMS

RECLAMATION AND LAND USE TASK FORCE

Adjacent lands - All lands within one-half mile of the proposed permit area.

Affected land - Land from which overburden is removed, or upon which overburden, development waste or refuse is deposited and access roads, haul roads, mineral stockpiles, mill tailings, impoundment basins, and all other lands whose natural state has been, or will be, disturbed as a result of the operations.

Approved reclamation plan - A detailed plan for rehabilitation of disturbed lands which has been approved by the administrator of the appropriate state agency.

Baseline studies - Documentation on site and prior to mining, the vegetation species and cover, wildlife species and abundance, soil classes and depth, climate, historical and archeological sites or lands of unique value, presence of rare or endangered species, and environmental or other factors required by the administrative agency.

Contouring or original contour - Grading or backfilling the land affected to a terrain consistent with proposed future use or similar in nature to the terrain existing prior to the commencement of the mining operation.

Critical habitat - A specific habitat characteristic which, if destroyed, would eliminate specific wildlife indigent and significant to the area. Examples: ponds for waterfowl or live streams for fish.

Date of seeding - The period of the year when seeding should be accomplished for the best chance of obtaining a successful stand. This is dependent upon the seasonal characteristics of precipitation and whether the species seeded and warm season or cool season.

Depth of seeding - The amount of soil coverage over the seed when planted. Optimum coverage is dependent upon seed size and soil texture.

Erosion control - Action taken to minimize both wind and water erosion on the areas involved.

Final cut - The last pit created in a surface-mined area.

Ground water - Natural water occurring below the land surface.

Highest previous use - Previous use of the land area which had the greatest economic and social value to the people of the area.



Highwall - Those sides of the pit adjacent to unmined land.

Monitoring - Periodic evaluation of environmental factors to determine the effect (if any) of the operation or changes occurring because of the operation.

Mulching - The placement of a material on the soil surface or creation of a soil condition which would decrease evaporation of soil moisture. Some mulching operations will also slow the erosive sources of wind and water. Common mulching materials include straw or hay, asphalt emulsion, wood fibers, excelsior mattings, etc.

Noxious weed - Any weed species designated as noxious by the appropriate state agency - usually perennial and difficult to control.

Orphan mine - A mined-out area which had been abandoned prior to the enactment of land reclamation statutes where the owner or operator has no legal responsibility for reclamation.

Overburden - All of the earth and other materials which lie above (or between) mineral deposits in the original state or as it exists after removal from its natural state in the process of surface mining.

Pit - A depression in the land surface created by the removal of overburden and mineral in the process of surface mining.

Proposed use of reclaimed lands - The planned use of the reclaimed lands after reclamation has been completed.

Rate of seeding - Pounds of seed per acre. Rate is determined by seed size and precipitation to which the area is subject. General recommendations are from 14 to 40 pure live seed per square foot. This may be too much in arid areas.

Reclaimed lands - Affected land which has been backfilled, graded, shaped, and revegetated or otherwise conditioned to make them suitable for any uses or purposes consistent with those enumerated in the reclamation plan.

Reclamation - The process of reconditioning or rehabilitating affected land to the useful purpose consistent with the approved reclamation plan.

Refuse - Waste materials directly connected with the mining or milling activity. This may include overburden, reject minerals, mill tailing, fly ash, etc.

Roughing land surface - Mechanical disturbance designed to leave the land surface in a rough condition to protect from excessive erosion and accumulate moisture. Common types of roughing include pitting, gouging, contour furrowing, etc.

Seeding techniques - Methods of seed application and coverage such as drilling, broadcasting and harrowing, hydro-seeding, etc.

Self-regenerating vegetation - Vegetation which is capable of reproducing itself over a long period of years and without artificially modifying the environment by such means as irrigation or fertilization.

Soil amendments - Materials added to the soil to change soil structure, texture, permeability, fertility or neutralize salts, acids or other toxic substances.

Soil survey - Identification and mapping of all soil material within the permit area as well as identification and location of those soil materials which can be used as suitable plant growth material.

Species selection - The determination of plant species and varieties to be introduced in the reclamation process. They must be adapted to the climate, soil, and proposed use of the site involved and should be self-regenerating.

Spoil - That part of the overburden lying between the subsoil and the mineral seam, or seams, and rejected minerals. This material is usually not suitable for supporting plant growth.

Spoil pile - A pile of spoil material prior to being graded, shaped, used as backfill material or topsoiled in preparation for reseeding.

Stockpile stabilization - Techniques applied to stockpiles of either spoil or topsoil to minimize both wind and water erosion. Roughing the surface and planting of temporary or annual plant species, planning directional location of stockpiles, and piling with gentle slopes are common procedures recommended for stockpile stabilization.

Strip mining or surface mining - Mining of a mineral by removing the overburden above the mineral and removal directly the deposits thus exposed.

Suitable plant growth material - That portion of the soil material (usually the A, and in some cases, the B horizon) found to be acceptable by the soil survey for respreding over the surface of the regraded areas to provide a medium for acceptable plant growth.

Topsoil - See suitable plant growth material above.

Topsoiling - Spreading of suitable plant growth material over the prepared spoil in preparation for revegetation of the area.

Toxic material - Material containing elements or compounds which, if within the root zone, would prohibit or inhibit normal plant growth or be absorbed by the plants in such quantity that the plant growth would be toxic to the grazing animal. Commonly excessive quantities of salts, acid generating pyrites, selenium, molybdenum, aluminum, or radioactive elements should not be within the root zone of the vegetation to be grown on the area.

Vegetation type - The kind of vegetation growing on the area. Usually designated or named according to the dominant (and sometimes the subdominant) species in cover or aspect.

Wildlife - All nondomesticated animals in the area. This includes not only the commonly accepted game animals, but small mammals, birds and aquatics such as fish.

## FORT UNION REGIONAL TASK FORCES

### Reclamation and Land Use Task Force Minutes of May 25, 1976 Ramada Inn, Casper, Wyoming

The meeting was called to order by Acting Moderator Senator Earl Christensen, Wyoming, at 9:00 a.m. All members and staff were introduced with the following members present: South Dakota - Senator Jack Jackson and Representative George F. Mortimer; Montana - Senator George F. Roskie, Representative Lee Hubing and Mr. C. C. McCall; North Dakota - Representative Byron Langley, Senator Shirley Lee, Dr. Robert Ralston and Mr. Bruce Hagen; Wyoming - Senator Earl Christensen, Dr. Robert Lang, Mr. Walter C. Ackerman and Mr. Merle Brooks. Staff members present from the lead state were Mr. Ralph E. Thomas, Director, Legislative Service Office, Ms. Kim Allen, Recording Secretary. Attending from the North Dakota Legislative Council was Ms. Sheila Miedema, Project Coordinator.

The group was welcomed by Senator Christensen. He introduced Ms. Sheila Miedema, Project Coordinator from the North Dakota Legislative Council, who in turn welcomed the Committee and gave an explanation of the purpose of the Task Force and recommended key areas of interest for the four-state study. Ms. Miedema explained to the Committee that the Task Forces have been set up for the four states of South Dakota, Montana, North Dakota and Wyoming and have been funded through the National Science Foundation. Travel expenses will be paid from this fund. The expenses will be paid according to the federal rate which is \$33 a day per diem (for meeting day only) and 15¢ per car mile or actual commercial air travel. The group was also informed by Ms. Miedema that the administrative details such as mailings, general information, minutes and meeting notices would be handled through the North Dakota Legislative Council.

#### Rules of Procedure

Senator Christensen suggested that the Committee set their rules and procedures at this time.

Discussion followed regarding a quorum. Senator Lee made a motion that a quorum be eleven members. The motion was seconded by Representative Hubing and passed without dissent.

Use of proxies was discussed. Senator Lee questioned whether the proxy should be a person or whether it could be a paper vote. A motion was made by Senator Lee to allow proxies but the proxy must be represented by a person present and a paper vote will not be allowed. An amendment was made by Dr. Ralston that the proxy be from the same group as the absentee. The motion was seconded by Representative Langley and carried without dissent.

Ms. Miedema advised that other Task Forces were using Roberts Rules of Procedures and this procedure seemed to be working well. This was agreeable with all members.

### Election of Officers

Representative Mortimer nominated Senator Christensen of Wyoming as Chairman of the Task Force. Representative Hubing seconded the nomination and Senator Christensen was elected by unanimous vote.

Senator Roskie nominated Representative Mortimer as Vice-Chairman. Representative Mortimer declined the nomination. Representative Hubing nominated Senator Roskie for Vice-Chairman. Representative Langley moved nominations cease and a unanimous ballot be cast for Senator Roskie. The motion was seconded by Mr. Brooks and passed without dissent.

Ms. Miedema suggested that a permanent secretary be elected to keep continuity in the minutes. Dr. Ralston made the motion that Kim Allen of the Wyoming Legislative Service Office be nominated. Senator Lee seconded the motion and the motion carried.

### Topics of Concern

- a. Veto Power of Surface Owner - Members from each state engaged in a discussion regarding the surface owners rights for damages and restoration from owners of the mineral estates. Senator Roskie felt that the four states could work together on the surface owners' rights and assert a united front against the federal government.
- b. Surface Owner Versus Mineral Owner - There was a limited discussion on this topic. It was the general agreement that the surface owner should be entitled to more than the mineral owner, as the surface owner is the one that pays the taxes. Chairman Christensen informed the group that he would be talking to United States Senator Hansen and would discuss the possibility

of a federal bill which would be more workable with the rights of the surface owner.

- c. Mineral Royalties or Fair Compensation - The representatives from all four states felt that since we are all export states, and coal is a nonrenewable resource, the tax base should be different on renewable and non-renewable states.

Ms. Miedema indicated that the Task Force on Taxation of Energy Resources was compiling a list of all types of taxes on minerals in the four-state area and she would bring copies of this compilation to the next meeting for a comparison.

- d. Orphan Mine Reclamation - Chairman Christensen informed the group that a bill was before Congress at this time regarding Strip Mining and felt it would be beneficial to await the outcome of this bill before the group decides to take any action.

Chairman Christensen also stated that nine provisions in the original Strip Mining Bill had been removed and now the bill looks more beneficial to the states.

- e. Bidding Versus Lump Sum Bonus - The members discussed this topic but there was some disagreement. It was felt the bidding should be on a royalty basis rather than a lump sum basis.
- f. Royalty Versus Bonus Bidding - The Committee felt that a bonus was irrelevant to bidding and failed to see how it related to reclamation and land use.

A motion was made by Senator Jackson, South Dakota, to refer items "e" (Bidding Versus Lump Sum Bonus) and "f" (Royalty Versus Bonus Bidding) of the tentative agenda to the Task Force on Taxation of Energy Resources, requesting a resolution be drawn up stating that funding be made through the state. The motion was seconded by Senator Lee, North Dakota, and passed without dissent.

- g. Exchange of Information - Everyone felt that the best way to exchange information would be for the four states to compare their experiences with that of the other states.

The Committee requested the Wyoming Legislative Service Office to update the handout on the Rehabilitation of Surface Mined Land and include South Dakota in this

update.

Mr. Thomas, Director, Legislative Service Office asked each state to provide the update and we would then compile the information.

- h. Guidelines for Determining When Reclamation has been Completed - Discussion regarding this topic was limited but everyone felt there was a problem between the mining operator and the surface owner.
- i. Possibility of Common Legislation and/or Agreements - Each state seemed to share common problem areas and felt each state should present their specific problems to the full Committee at the next meeting for comparison and further discussion on how to handle these problems.
- j. Similar Statutes on Rules, Regulations and Bonding Provisions - Mr. Walt Ackerman, Wyoming, agreed to distribute copies of the reclamation and bonding requirements to Committee members for a more detailed discussion.
- k. Preplanning of Land Use - This area of discussion was of major concern to the members. A lengthy discussion followed as to whether or not land should be returned to its original use or a higher, better use than before. Preplanning was a definite priority and members agreed that this topic could be tied in with Reclamation and Land Use on Indian-owned lands and should be discussed in detail at the next meeting.

The above is an overview of all topics discussed. For further details and insight it was decided that the areas of greatest concern would be coordinated through Ms. Miedema, Project Coordinator. The Legislative Service Office in each state would help Ms. Miedema prioritize the problem areas in that particular state.

#### Information Requested

Ms. Miedema was requested to bring to the next meeting a compilation on mineral taxes in each of the four states. The compilation is now being prepared by the Taxation of Energy Resources Task Force.

The Wyoming Legislative Service Office was asked to compile an update of the handout on Rehabilitation of Surface Mined Land. Each state was asked to update its particular portion of the report and forward to the Wyoming Legislative Service

Office for a complete compilation of all states.

Mr. Walt Ackerman, Wyoming, will distribute copies of Wyoming's reclamation and bonding requirements at the next meeting.

#### Perspective Goals

1. Possible continuing regional task forces to carry on with the same areas of study.

2. Exchange of information and common legislation throughout the four state region.

Approximately two or three more meetings are anticipated, the next one tentatively scheduled for late July in Miles City, Montana. The exact date will be set by the Chairman and Vice-Chairman.



FORT UNION REGIONAL TASK FORCES

Reclamation and Land Use Task Force  
July 22, 1976

Members of the Reclamation and Land Use Task Force took a guided tour of Colstrip, surrounding mining and reclamation sites and the power plant on Thursday, July 22, 1976. The tour was sponsored by Western Energy and Peabody Coal Company.

Members Attending:

South Dakota

Senator Charles E. Flyte  
Representative G. F. Mortimer  
Mr. Al Griffiths

Montana

Senator George F. Roskie  
Representative Lee Hubing  
Representative Herb  
Huennekens  
Mr. C. C. McCall

North Dakota

Representative Byron Langley  
Representative Karnes Johnson  
substituting for Senator  
Shirley Lee  
Mr. Chaske Wicks  
Miss Sheila Miedema,  
Project Coordinator

Wyoming

Senator Earl Christensen  
Representative Donald  
Scott  
Dr. Robert Lang  
Miss Kim Allen,  
Recording Secretary

Others Attending:

Jim Langley, North Dakota  
Mrs. Karnes Johnson, North Dakota  
Mr. Richard Bean, North Dakota  
Mr. Ron Becker, South Dakota  
Mr. Randy Snell, Miles City Chamber of Commerce  
Mr. Larry Mayer, Miles City STAR

PORT UNION REGIONAL TASK FORCES

Reclamation and Land Use Task Force

Minutes of July 23, 1976

Red Rocks Village Motel - Miles City, Montana

The meeting was called to order by Chairman Earl Christensen at 8:00 a.m. with the following members present:

South Dakota

Senator Charles E. Flyte  
Representative G. F. Mortimer  
Mr. Al Griffiths

Montana

Senator George F. Roskie  
Representative Lee Hubing  
Representative Herb Huennekens  
Mr. C. C. McCall

North Dakota

Representative Byron Langley  
Representative Karnes Johnson  
    substituting for Senator  
    Shirley Lee  
Mr. Chaske Wicks

Wyoming

Senator Earl Christensen  
Representative Donald Scott  
Dr. Robert Lang  
Mr. Walter C. Ackerman

Others

Miss Sheila Miedema, Project Coordinator  
Miss Kim Allen, Recording Secretary  
Mr. Richard Bean, Operations Officer, Bureau of Indian Affairs

Members Absent:

South Dakota

Senator Jack Jackson  
Mr. Ed Williamson

Montana

Senator Carroll Graham

North Dakota

Senator Shirley Lee  
Dr. Robert Ralston  
Mr. Bruce Hagen

Wyoming

Mr. Merle Brooks

Chairman Christensen welcomed the group and gave a special thanks to Representative Lee Hubing for his efforts in making the arrangements for the meeting in Miles City.

A motion was made by Representative Mortimer and seconded by Representative Hubing to approve the minutes as distributed from the previous meeting. The motion carried.

Ms. Miedema gave a presentation on mineral taxes in the four state area. The material presented by Ms. Miedema had been prepared by Western Governors' Regional Energy Policy Office and a copy of the report was distributed to everyone present. There were several discrepancies noted in the report which were corrected at the time.

Ms. Miedema presented some facts on possible pending federal legislation relating to energy development which might directly involve the four states.

The Clean Air Act and the Moss Amendments could have a negative effect on any future development in this area if passed by Congress;

The Black Lung bill would add to the cost of coal per ton if passed;

The Synfuels bill is a major item at the present time. This bill would guarantee loans for energy development companies and if passed it would cause the energy companies to increase their interest in the water in our area.

Proposed amendments to the Mineral Leasing Act of 1920 would be very beneficial to the four states because it would increase the percentage of federal mineral leasing revenue returned to states, would allow loan programs for states to

borrow against future mineral leasing revenues to finance community impacts and would provide for land use planning by the Bureau of Land Management for surface lands privately owned when minerals are owned by the federal government.

#### Reclamation Laws of Each State

Chairman Christensen reported that Wyoming's current reclamation law was enacted in Wyoming in 1973 as part of the Environmental Quality Act. In 1975 an amendment was passed dealing with land owner consent and in 1976 an amendment was passed that exempted small sand and gravel permits under five acres. These laws are administered by the Department of Environmental Quality.

Dr. Lang reported that the Agriculture College at the University of Wyoming is presently working on land reclamation in the following three phases:

- A. Actual reclamation of mineral lands;
- B. Base Line Studies - what was there before the mining took place and monitoring the land after mining;
- C. Studies relating to sulfur dioxide on native vegetation.

Dr. Lang felt that he and his students were coming up with some very satisfactory solutions to present reclamation problems.

Montana's reclamation laws were presented by Mr. McCall.

Mr. McCall distributed and explained Montana's law on strip and underground mining reclamation, stating that the state of Montana has the option to increase the bonding level as needed, but the state has to maintain the bond for at least five years.

The main criteria Montana uses for reclaiming land are:

- A. Feeding and withstanding grazing pressure from a quantity and mixture of wildlife and livestock at least comparable to that which the land could have sustained prior to the operation;
- B. Regeneration under the natural conditions prevailing at the site;
- C. Preventing soil erosion to the extent existing prior to the operation.

Mr. McCall felt the most important thing in land reclamation is to blend mining in with other natural resources and work to alleviate as much damage as possible.

Representative Mortimer felt it was good to be aware of the three surrounding states' experiences in the area of strip mining and reclamation because the mineral resources in South Dakota are largely undeveloped and problems such as the other states face would no doubt arise in the future.

Mr. Al Griffiths stated that most mining operations in South Dakota deal with limestone and sand. When the initial application is sought, if the surface or any wildlife in the surrounding area is disturbed further information is required before a permit may be obtained.

In the absence of Mr. Hagen of North Dakota, Ms. Miedema presented North Dakota's reclamation laws.

Ms. Miedema stated that an application for a surface mining permit must be accompanied by a set fee and a bond payable to the state of North Dakota. In addition there is a coal severance tax in the amount of 52¢ per ton. Ms. Miedema explained the surface owner was protected by the Surface Owner's Protection Act. Land use planning in North Dakota is basically accomplished on a local or restructured regional basis.

### Resolutions

Copies of several resolutions were distributed and explained by Miss Miedema.

This first resolution was directed to the Common Data Element and Information Exchange Task Force from the Reclamation and Land Use Task Force asking them to coordinate information exchange between all branches of government and interested persons or entities in the private sector; with the exchange relating to research projects and other pertinent data on land use and reclamation in the four state area.

The second resolution was to the Taxation of Energy Resources from the Reclamation and Land Use Tax Force asking them to consider bidding, lump sum bonus, royalties and bonus bidding on their agenda.

The Taxation of Energy Resources Task Force sent an official notification to the Reclamation and Land Use Task Force stating that they would not consider the items for discussion enumerated in the resolution.

The third resolution was sent to all Fort Union Regional Task Forces from the Common Data Element and Information Exchange Task Force asking each Task Force to develop their own definitions for their particular area of study and forward them on to the Common Data Element and Information Exchange Task Force.

Chairman Christensen suggested that a subcommittee be formed to define certain definitions that deal with reclamation and land use and bring these suggestions to the next meeting for full Committee approval.

Representative Huennekens asked if the definitions stated in each state's statutes would serve the purpose.

Chairman Christensen appointed Representative Mortimer, South Dakota; Senator Roskie, Montana; Representative Langley, North Dakota; Representative Don Scott and Dr. Lang, Wyoming to serve on the subcommittee to spell out specific definitions of terms in the reclamation field.

#### Indian Lands

Mr. Chaske Wicks discussed reclamation and land use planning on Indian owned lands. Mr. Wicks briefed the group on the Indian agents or superintendents assigned to reservations and what their specific duties were, and went on to give the lease policies and reclamation policies that have to be followed on all Indian owned lands.

#### Next Meeting

A motion was made by Mr. Wicks and seconded by Mr. Huennekens for the next meeting to be held September 24, 1976, in South Dakota.

It was suggested that the group tour the mines in South Dakota on September 23, and have the meeting on September 24, 1976.

Representative Mortimer agreed to make arrangements for the next meeting and inform the group as to where it will be, Spearfish or Belle Fourche.

There was limited discussion on who should be invited to attend the next meeting to speak on specific reclamation laws.

It was agreed that Mr. Joe Stenchfield from the Upper Midwest Council be invited to speak at the next meeting.

There being no further discussion a motion was made by Representative Scott and seconded by Mr. Wicks to adjourn. Motion carried.

The meeting adjourned at 12:45 p.m.

FORT UNION REGIONAL TASK FORCES

Reclamation and Land Use Task Force  
September 23, 1976

Members of the Reclamation and Land Use Task Force took a guided tour of the bentonite mining areas surrounding Belle Fourche, South Dakota. The tour was sponsored by the four bentonite mining companies: American Colloid, Baroid Petroleum Company, Federal Bentonite and International Minerals and Chemical Corporation.

Members Attending:

SOUTH DAKOTA

Senator Charles E. Flyte  
Representative G. F. Mortimer

MONTANA

Senator George F. Roskie  
Senator Carrol Graham  
Representative Lee Hubing  
Mr. Joe Murphy substituting  
for Mr. C. C. McCall

NORTH DAKOTA

Representative Byron Langley  
Representative Karnes Johnson  
substituting for Senator  
Shirley Lee  
Mr. Chaske Wicks  
Dr. Robert Ralston  
Ms. Sheila Miedema,  
Project Coordinator

WYOMING

Senator Earl Christensen  
Dr. Robert Lang  
Ms. Kim Allen,  
Recording Secretary

Others Attending:

Lenore Hubing, Terry, Montana  
Gene Wehrman, Billings, Montana  
Robin Carpenter, Rapid City, South Dakota - 6th District Planning  
Roger Elkins, Rapid City, South Dakota - 6th District Planning  
Charles Baldwin, Belle Fourche, South Dakota - Baroid  
Keith Collins, Belle Fourche, South Dakota - Baroid  
Randy Sartius, Belle Fourche, South Dakota - Baroid  
Terral Young, Belle Fourche, South Dakota - Baroid  
John Heinert, Belle Fourche, South Dakota - IMC  
J. D. Jenkins, Belle Fourche, South Dakota - IMC  
Charles Snyder, Belle Fourche, South Dakota - IMC  
Boyd Keingler, Belle Fourche, South Dakota - American Colloid  
Bob Baker, Belle Fourche, South Dakota - American Colloid  
Marv Kron, Belle Fourche, South Dakota - Federal Bentonite  
Gary Ballenger, Belle Fourche, South Dakota - Federal Bentonite  
Tim Kruse, Bismarck, North Dakota  
Joe C. Appert, Bismarck, North Dakota  
Mike Murphy, Minneapolis, Minnesota - Upper Midwest Council



FORT UNION REGIONAL TASK FORCE

Reclamation and Land Use Task Force

Minutes of September 24, 1976  
Corral Room, First National Bank Building  
Belle Fourche, South Dakota

The meeting was called to order by Chairman Earl Christensen at 8:45 a.m. with the following members present:

South Dakota

Senator Charles E. Flyte  
Senator Jack Jackson  
Representative G. F. Mortimer  
Mr. Al Griffiths  
Mr. Ed Williamson

Montana

Senator George F. Roskie  
Senator Carrol Graham  
Representative Lee Hubing  
Representative Herb Huennekens  
Mr. Joe Murphy substituting  
for Mr. C. C. McCall

North Dakota

Representative Byron Langley  
Representative Karnes Johnson  
substituting for Senator  
Shirley Lee  
Mr. Chaske Wicks  
Dr. Robert Ralston  
Mr. Dean Peterson substituting  
for Mr. Bruce Hagen

Wyoming

Senator Earl Christensen  
Dr. Robert Lang

Others

Mr. Michael Murphy, Upper Midwest Council, Guest Speaker, Minneapolis, Minnesota  
Ms. Sheila Miedema, Project Coordinator, Bismarck, North Dakota  
Ms. Kim Allen, Recording Secretary, Cheyenne, Wyoming  
Ms. Lyn Gladstone, Rapid City Journal, Rapid City, South Dakota  
Ms. Faye Kennedy, Daily Post, Weekly Belle Fourche Bee, Belle Fourche, South Dakota  
Mr. Will Walker, KBFS Radio, South Dakota  
Mr. Dexter Gunderson, Federal-State Director, Federal Energy Administration, Program VIII  
Mr. Hugh Hillyer, South Dakota Department of Agriculture  
Mr. Bob Baker, American Colloid, Belle Fourche, South Dakota  
Mr. Terral Young, Baroid Petroleum Company, Belle Fourche, South Dakota  
Mr. Gary Ballenger, Federal Bentonite, Belle Fourche, South Dakota  
Mr. John Heinert, International Minerals and Chemical Corporation, Belle Fourche, South Dakota

Members Absent:

Wyoming

Representative Donald Scott  
Mr. Walter C. Ackerman  
Mr. Merle Brooks

\* \* \* \* \*

Chairman Christensen welcomed the group and expressed his appreciation to Representative Mortimer for his efforts in making the arrangements for this meeting. He gave a special thanks to the four bentonite mining companies for the guided tour and all other courtesies extended to the group.

Chairman Christensen informed the bentonite representatives that the task force members did understand their problems with mining state-owned lands and asked that they feel free to discuss any topic they feel would benefit a group such as this. Any information relating to the Reclamation and Land Use Task Force that they would like included in the final report should be submitted to the project coordinator.

Consideration of Minutes

Chairman Christensen advised of one correction to the minutes of the previous meeting. He asked that Mr. Walt Ackerman's presentation on coal in Wyoming and in the surrounding areas be noted in the minutes.

There being no further corrections to the minutes, Senator Roskie made a motion to approve the minutes as corrected. The motion was seconded by Senator Jackson and passed unanimously.

Pending Federal Legislation

Ms. Miedema, Project Coordinator, reported on the following pending legislation:

Strip Mining Bill - killed in House of Representatives again.

Synthetic Fuels Bill - to be voted on during the last week of September.

Moss Amendments to the Clean Air Act - defeated and amended with various parts of the bill passing.

Black Lung Bill - unlikely to pass. If passed it would have a direct effect on the price of coal in this area.

Uranium Enrichment - no further action taken.

Conservation Laws - veto on coal leasing act covering federal lands was overridden.

Eminent Domain for Slurry Pipelines - highly unlikely to pass.

Presentation by Mr. Michael Murphy

Mr. Michael Murphy, Upper Midwest Council, Minneapolis, Minnesota, gave a presentation on reclamation and land use.

Mr. Murphy explained that the Upper Midwest Council is a nonprofit research organization funded by government grants and other contributions. The Council was created approximately 15 years ago by a group of men who were from the upper midwest area whose purpose was to research current issues in the area objectively.

The main issue researched by the Council is energy. However, research is also conducted in the fields of land use and agriculture, energy use and agriculture, transportation, health and education, and certain areas of regional planning and regional government.

In the area of land use, Mr. Murphy expressed the following views which he believes must be considered in order to have definite coordination between landowners, surface right owners and utility companies:

- a) environmental aspects,
- b) social aspects,
- c) ethical aspects,
- d) philosophical ideas relating to land use,
- e) the use of eminent domain, and
- f) place higher priority on utility services than on other services

He went on to explain the major problems the farmers and the utility companies encounter with each other. The utility industries feel the farmers want too much money, while the farmers feel it is their right to do with their land what they want. They do not like the ideas of power plants, rights-of-way and transmission lines going through their land.

Mr. Murphy also brought up the problem of transmission lines going across one state but providing power to another.

Mr. Murphy agreed that solutions to these problems are not easy, but each state could begin by establishing land use priorities and establishing a fixed interest in land use. It is important for the private sector to be fully aware of, and respond to, the land use constraints extant or planned.

Mr. Murphy stated that economic decisions made many miles away have a definite impact on the local land use policies and decisions. He felt one way to determine the wants and needs of the people is to literally survey the type of people in an area and draw up a description of the way those people perceive future use of the land.

Policies can be administered and mistakes can be corrected more easily at the local level. It is important for the private sector to find out and understand what the public really wants regarding land use.

Senator Jackson felt the primary concern of the rural states was the fact that they are not important to large industries. He raised the question of what happens once we commit ourselves to coal production, what the recourse will be to protect our private industries and individuals.

Mr. Murphy concluded his presentation by stating that the private sector has everything to gain and everything to lose just the same as the utility companies do, and each issue should be clearly stated and understood by the public before any action is taken.

Ms. Miedema conveyed Mr. Raymond A. Peck's apologies for his absence at the meeting. Mr. Peck is Deputy Assistant to the Secretary for Energy and Minerals, Department of the Interior and was called back to Washington, D.C., unexpectedly. He asked that Ms. Miedema advise anyone with particular questions regarding any federal reclamation activities to feel free to call on him at any time.

#### Subcommittee Report

Chairman Christensen called on the subcommittee to report on their recommendations of definitions dealing with reclamation and land use for the Common Data Element Task Force.

Representative Mortimer expressed his appreciation to Dr. Lang for compiling a list of common terms for the task force and distributed copies to each member. Several minor changes were noted in the definitions after which Representative Mortimer made a motion to adopt the terms as stated. Senator Roskie seconded the motion and it passed without dissent.

Ms. Miedema, Project Coordinator, explained that a book will be prepared, featuring the highlights of all the task forces' activities and a list of common terms submitted by each task force, and would be available for distribution at a later date. She also indicated that a revised copy of the definitions would be sent to members showing the changes made.

already established task force if it were funded by other means. Other task forces have suggested they approach their individual legislative service agencies for possible funding.

Chairman Christensen felt the task force could get together at the Five-State Conference which is held every two years to discuss these specific problem areas and the possibility of common legislation.

Representative Huennekens made a motion that each state approach their individual legislative service agencies for funding for the continuation of the task forces. The motion was seconded by Senator Roskie.

Representative Mortimer amended the motion to state that the task forces be funded on a limited basis of one meeting per year.

Representative Huennekens felt that one meeting a year would not be a sufficient amount of time to complete any research which might be required of the group.

Mr. Wicks felt that since the Indians have never really been fairly represented until now, the task forces should be continued on a regular basis.

Following discussion, the chair asked for a vote on the amendment to the motion. The amendment failed. The motion as originally stated passed with one dissenting vote.

Mr. Griffiths suggested that the Old West Regional Commission be approached for possible continued funding of the task forces. However, before approaching any organization one should be aware of the approximate cost of a meeting so he may advise as to how much money is being requested.

Ms. Miedema informed the group that approximately one-half of the money funded for all the task forces has been spent and most task forces have completed their assignments and conducted their final meeting.

Dr. Ralston questioned Ms. Miedema on where the additional money granted to the Fort Union Coal Conference for the task forces would be spent.

Ms. Miedema replied that the North Dakota Legislative Council was in the process of preparing a report on the actual cost per meeting and the actual cost per individual for all task forces in the conference. This information would be compiled and available for distribution at a later date for anyone interested.

### Discussion on Final Report

Representative Mortimer felt it was most important to include a synopsis of the information submitted by the bentonite mining companies in the final report, as their input is invaluable to a study such as this.

Mr. Terral Young, representing the Baroid Company, expressed his concern regarding land use and reclamation. Minerals only occur in certain locations in the world. Therefore, when land use decisions are made on the local level they have far-reaching impacts and affect the national level as well. There is no state that is self-sufficient in mineral resources and each state with mineral enrichment has a responsibility to other states.

Representative Hubing questioned whether or not the task force would be interested in a report from the Wyoming and Montana coal companies as well as the South Dakota companies to be submitted in the final report.

Chairman Christensen felt that a report should be submitted by each company and included in the final report for comparisons.

Dr. Ralston indicated that he would like to see a compilation of the exact research which has been accumulated throughout the four-state area included in the final report and the location of its availability for use by all legislators.

Mr. Wicks stated that he is conducting a land use study for his tribe in North Dakota which he would like distributed to all task forces so they may be aware of what the Indians are doing and would also like it included in the final report.

Chairman Christensen felt that a bibliography and a brief synopsis of the group's accomplishments would be most important in the final report and suggested that anyone with particular input submit their suggestions to Ms. Miedema for completion of the report.

Ms. Miedema agreed to send a rough draft copy of the final report to each member for any amendments or changes which should be incorporated into the report before the final copy is printed.

### Continuation of Task Force

Senator Roskie brought up the question of who would be responsible for financing the task force if it were to continue.

Ms. Miedema informed the group that the National Science Foundation would not fund another group of task forces (or a single task force) such as this. Therefore, she would not be able to reapply for another grant. However, it would be possible to continue with the

### Next Meeting

Chairman Christensen asked if anyone felt there is a need for another meeting.

Representative Huennekens felt that since the group had completed their assigned tasks, there was no real need to schedule another meeting at this time.

Mr. Wicks suggested that all the task forces meet in one place to present a synopsis of their goals and achievements to all the other task forces.

Following discussion, Representative Langley moved that all seven task forces meet in Bismarck, North Dakota, coordinated by Ms. Miedema, following the general election in November, to review accomplishments with all others involved in the Fort Union Coal Conference. The motion was seconded by Senator Flyte and passed by a vote of eight to six.

There being no further business, Senator Roskie made a motion that the meeting be adjourned. The motion was seconded by Mr. Griffiths and the meeting adjourned at 11:45 a.m.



## DEPARTMENT OF STATE LANDS

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November 30, 1976

Ms. Sheila Miedema  
North Dakota Legislative Council  
State Capitol Building  
Bismarck, ND 58505

Dear Sheila,

Thank you for sending me a copy of the rough draft of the final report of the Fort Union Regional Task Force on Reclamation and Land Use. I appreciate your invitation to submit any additional changes, additions, corrections or recommendations.

In reading Appendix "F", (letter from Bentonite Industry expressing their views on Mined Land Reclamation and Land Use), I noticed several topics that I would like to further expand on.

1. Change in personnel or turnover has been a serious problem in Montana regarding the establishment and maintenance of a consistent and uniformly high quality reclamation program. In a period since June, 1973, (staff size 7), the Montana Reclamation Division have lost 15 employees for various reasons. Personnel has been lured away by the mining industry, consulting firms, other governmental agencies, etc. The three (3) Bureaus covering Coal, Sand and Gravel and Hard Rock have had 9 people in leadership positions over the same time span. It is impossible to deliver a quality product with that kind of turnover and it is exhausting to the experienced employees having to constantly carry their load and pick up the slack of untrained new employees or vacated positions.

This turnover problem was not unexpected - many states have experienced it over past years. Experience in reclamation is a valuable commodity and in demand. Montana and other states must be able to reasonably compete salary wise with industry, consulting groups and the federal government if the excessive turnover trend is to be reversed. Of interest is the fact that West Virginia, (a major coal mining state for decades) has recognized their Division of Reclamation turnover problems and the legislature has taken what seems to be a plausible solution. Beginning July 1, 1976

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all inspectors and supervisors within the Division must receive a minimum salary of \$15,000 per year. A spokesman said that "it is hopeful that this will enhance retention and program development." Reclamation responsibilities in Montana are cumulative in that mining areas must be inspected until all bond is released. Quality personnel with experience must be retained and the staff must grow in relation to cumulative growth of the industry and additional responsibilities.

2. Another of my concerns is that the company applying for a mining permit either gathers or has their consultants gather the supporting resource information on which the application is approved or denied. No mining company tears up the earth primarily for the sake of reclaiming it. The top priority has to be mineral production and profits. Reclamation is a secondary necessary requirement. In Montana, reclamation of coal mined lands is the legislated top priority of the state Reclamation Division. I believe that the Reclamation Division personnel after detailed discussion and field inspections of the proposed mining site could design a data gathering effort specifically addressing the known and suspected problems of the particular area under application. Data gathering could be redirected promptly upon preliminary evaluations of incoming data to more specifically address newly focusing relevant problems. As it presently stands there are wide spans of gray areas where simply answers are not known. In some cases, too little or not enough relevant information on the site specific problem areas has been provided. In other words, some permits are being issued with a great degree of uncertainty of whether reclamation under the law will occur or not. If the Reclamation Division was responsible for the gathering of resource data specifically and relevantly designed for each mine I believe that the gaps of gray caused by too little or not specifically relevant information could be narrowed allowing a more technically sound decision to be made regarding reclamation possibilities. We will never know all answers, however, progress CAN be made by my suggested approach, in my opinion.

Thank you for the opportunity to add comments to the rough draft of the final report.

Respectively,

C. C. McCall, Administrator  
Reclamation Division





